Form 3160-3 (July 1992)

# UNITED STATES DEPARTMENT OF THE INTERIOR

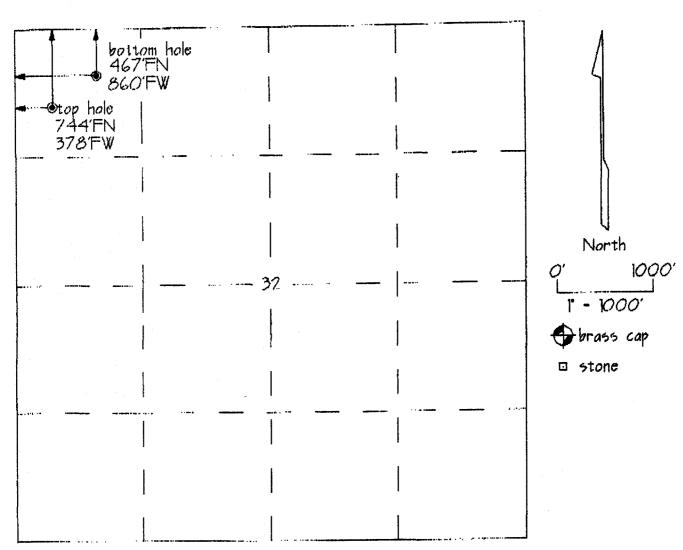
SUBMIT IN TRIPLICATE E\*

(Other instructions on reverse side)

FORM APPROVED OMB NO. 1004-0136 Expires: February 28, 1995

DEPARTMENT OF THE INTERIOR  BUREAU OF LAND MANAGEMENT							5. LEASE DESIGNATION AND SERIAL NO. 14-20-603-373 (BIA)	
Appli					OR DEEPEN		6. IF INDIAN, ALLOTT	• •
1a. TYPE OF WORK					ON DEEP EN		Navajo	NAME
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b. TYPE OF WELL	ıs 🗇				NGLE MULTIP	L= []	8. FARM OR LEASE NAME, W	
2. NAME OF OPERATOR	ELL OT	HER			<u> </u>		Clay Hill C	Canyon 32D
Harken South	west Corpo	ration					9. AFI WELL NO.	
3. ADDRESS AND TELEPHONE NO.							10. FIELD AND POOL,	
P. O. Drawer	612007,		TX 7	5261 th any 8	(817) 695-4900 tate requirements.*)		Wildcat	OR WILDCAT
At surface				-			11. SEC., T., R., M., OB AND SURVEY OR	BLK.
/44'     At proposed prod. zon	NL & 378' I •	-WL			-		Sec. 32 4	
467 F	NL & 860' I	-WL					12. COUNTY OR PARIS	
			•	ST OFFICI	,•		San Juan	UT
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(Also to nearest drig 18. DISTANCE FROM PROP	OSED LOCATION*	· }		19. PR	OPOSED DEPTH	20. ROTA	RY OR CABLE TOOLS	
TO NEAREST WELL, D OR APPLIED FOR, ON TH	RILLING, COMPLET: IS LEASE, FT.	ED,		5570	T VD/5680' MD		Rotary	
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23.		PROPOS	SED CAS	SING ANI	CEMENTING PROGRA	.M		
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12 - 1/4" 7 - 7/8"	K-55		<u>24#</u>	<del></del>	425'	_	Stage Cement	<u>u</u>
7 - 7/8	K-55		5.5#		5680' (MD)	Detai	iled on page 2	of Ten Point
		1				Drill	ling Plan	
Ten Point Surface U	ts & Exhib	olan its as refe	ic to dean	n give dat	C a on present productive zone al depths. Give blowout prev	e and propose enter program	, it any.	f proposal is to drill or
SIGNED XXXIII	1/6	dagmer	M ,	, PITLE	Production A	dminist	rator DATE 5-3	51-74
(This space for Fed	eral or State office	e use)	1		<del>APPFIC</del>	VED 5	THE STATE	A.W.
11-	, , , , ,	JIMHI	U		APPROVAL DATEOLE.	TAH D	IVISION OF	
Application approval does	not warrant or certify	that the applicant ho	ids legal o	r equitable t	itle to those fight if the subject	t lease which v	would en the second	conduct operations thereon
CONDITIONS OF APPROVA	AL, IF ANY:				BY:	10	27-7	7
					WELL SP	ACINIC	Janke	4
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# Well Location Plat



# Well Location Description

HARKIN SOUTHWEST CORPORATION
Clay Hill Canyon 32-D
744' [NL & 378' FWL (top hole)
467' FNL & 860' FWL (bottom hole)
Section 32, T.41 S., R.75 E., SLM
San Juan County, Utah
4653' ground elevation from seismic
State plane coordinates from seismic control
x = 2,668,718 y - 196,481 (top hole)
x = 2,669,201 y = 196,758 (bottom hole)
sta. 243.88, 45'rt. line WMT = 07 swath

rev: 26 MAY 1994

Gerald G. Huddleston, L's

The above is true and correct to my knowledge and belief.



MARKEN BAHRAIN

918013593940303

Form 2160-3 (July 1992)

SUBMIT IN TRIPLICATE.

OMB NO. 1004-0136 Expires: February 28, 1995

UNITED STATES (Other Instituctions on Preverse side)

DEPARTMENT OF THE INTERIOR (VEO

BUREAU OF 1 AND 1144

3. LEASE DESIGNATION AND BERIAL NO.

BUREAU OF LAND MANAGEMENT

14-20-603-373 (BIA)

FORM APPROVED

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b. TIPE OF WELL  OIL ON WELL OTI  OF OPERATOR		NOLE MCLTIPI	Clay Hill Canyon 32D
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3. ADDRESS AND TELEPHONE NO.	4.4.1		
P. O. Drawer 612007,			10. FIRED AND POOL OR WILDCAY Wildcat
4. LOCATION OF WELL (Report location clean At surface	rly and in accordance with any 8	raté tedattementa-	
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17.3 4.27	PROPOSED CASING AND	CEMENTING PROGRAM	M SUBJECT TO COMPLIANCE WITH ATTACHED
SIZE OF MOUL SERVE SERBOF CH	SHC WEIGHT FER FOOT	SETTING DEFIN	"GENERAL RECOFFEE MENT
12 - 1/4" K-55	24#	4251	305 SX Class "G"
7 - 7/8"   K-55	15.5#	5680' (MD)	Stage Cement
		\-	Detailed on page 2 of les 20 Drilling Plan

- Lached

CONTITIONS OF APPROVAL IF ANY.

APPROVE: 55

Petarled Unilling Program Ten Point Drilling Plan Sunface Use Plan Attachments & Exhibits as refounced .3)

cc: State of Utah IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If propose in the companies are performed day of subjections and measured and the control depths. God blowout preventer program, if any, Production Administrator DATE 5. drate pince use) APPROVAL DATE conception approved does not warrant or certify that the applicant holds legal or equipment title to those rights in the subject is

AUG 1 8 1994 Landy wan DISTRICT MANAGER

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Form 2160-3 (July 1992)	UNIT	ED STATES	SUBBLE IN THE (Other instruction reverse since the contract of	tions on	FORM APP OMB NO. 10 Expires: Februs	004-0136
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	AS OTHER		SINGLE MULTIF	<b></b> 🗆	S. FARM OR LEASE HAME. WE Clay Hill Ca	
2. NAME OF OPERATOR	wast Companyia				9. AFI WELLING.	
3. ADDRESS AND TELEMONENO.	west Corporation	<u> </u>				
P. O. Drawer	612007, Dall			-	Wildcat	R WILDCAT
At surface 744' F	NL & 378' FWL				11. SBC., T., R., M., OR I AND SURVEY OF AL	SLX.
At proposed prod. zor			•			LS 25E
14. DISTANCE IN MILES	N 8 860 FW	BAT TOWN OR FOST OFF	7CE*		12. COUNTY OR PARISH	18. STATE
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18. DISTANCE FROM PRO TO NEAREST WELL, I OR AFFLIED FOR, ON TO	DRILLING, COMPLEXED.	55	THOPOSED DEFTE  70 I VD (5680 MD)		Rotary	
21. Eletations (Show w	4653' GL/4666' I		or pursuant to 43 CFR went to 43 CFR 3186.4	•	July 15	1994
23.			ND CEMENTING PROGRA	UNILL	NG OPERATIONS AUT CT TO COMPLIANCE V	
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12 - 1/4"	K-55	24#	4251		305 SX Class "G	311
7 - 7/8"	K-55	15.5#	5680' (MD)		Stage Cement	
					led on page 2 ing Plan	of Ten Poin

## Attached:

APPROVED BY

Detailed Drilling Program
Ten Point Drilling Plan
Surface Use Plan Attachments & Exhibits as referenced (10)

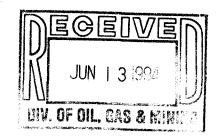
	· · · · · · · · · · · · · · · · · · ·	cc: State of Utah
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#### HARKEN SOUTHWEST CORPORATION

#### **DETAILED DRILLING PROGRAM**

Clay Hill Canyon 32-D
Section 32-41S-25E
Surface: 744' FNL & 378' FWL
Subsurface: 467' FNL & 860' FWL

San Juan County, Utah



ELEVATION: 4653' GL /4666' KB

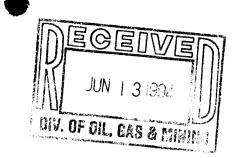
PROPOSED TOTAL DEPTH: 5570' TVD / 5680' MD

PROJECTED HORIZON - Primary Target: Desert Creek

#### GENERAL DRILLING PROCEDURES:

- 1. Build location and prepare access road. Fence reserve pit on 3 sides. NOTIFY BLM FARMINGTON NEW MEXICO (505/327-5344) and STATE OF UTAH (801\538-5340) 24 hours prior to spud. NOTE on report the person(s) contacted. Post copies of all regulatory permits in the doghouse. Erect a well location sign.
- 2. Move in and rig up rotary tools. Report GL to KB measurement and also report any conductor casing depth on IADC tour sheets and morning reports. Have water checked by cementing company for compatibility.
- 3. Drill mousehole and rathole. Mix mud prior to spudding well.
- 4. Drill 12-1/4" hole to +\- 425'. Use fresh water gel/lime spud mud for surface hole. Prepare to run deviation surveys at casing point and/or bit trip. Wellbore is not to exceed 1 degree to 425'.
- 5. RU casing crew to run:
  8-5/8", 24#/ft, K-55, STC casing to 425'
  Cement with 305 sx of Class "B" cement (1.15 yield; calculated @ 100% excess) with 2% CaCl<sub>2</sub> and 1/4 lb/sx Celloflake. (with sufficient slurry volume to circulate cement to surface).
- 6. WOC a minimum of 4 hours prior to nippling up for BOP stack and related equipment. See BOP schematics for detail Exhibit A.

Harken Southwest Corp. Ten Point Drilling Plan Clay Hill Canyon 32D Page 2 of 2



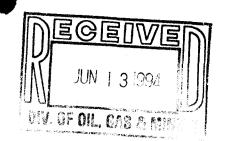
- 7. Ensure plug has been down at least 8 hours prior to commencing pressure test procedures. Pressure test BOP to 2500 psig for 30 minutes. Pressure test manifold and all related equipment to 2500 psig. Pressure test casing to 2000 psig for 30 minutes. NOTE: Notify BLM Farmington, New Mexico (505\327-5344) 24 hours prior to BOP test. Note notification and testing results on IADC tour reports.
- 8. Drill out surface casing with 7-7/8" bit. Drill 7-7/8" hole to ± 5680' MD/5570' TVD. Deviation surveys are to be taken every 500' or on a bit trip, whichever occurs first down to kick-off point (KOP). KOP is estimated to be at +\- 3225'. Mud motor and directional equipment will be utilized as per Well Profile Data Sheet prepare by Baker Hughes and enclosed as Attachment 5.
- 9. Run open hole logs and evaluate. Logging and testing will be in accordance with details outline in item 8, *Well Evaluation*, of the Ten Point Drilling Plan. Coring and/or drill stem testing will determined based on the recommendation of the wellsite geologist.
- 10. If the well is determined to be productive, run 5-1/2" casing to TD, as per casing design outline in item 4, *Proposed Casing/Cementing Program*, of the Ten Point Drilling Plan. In addition to placing centralizers over potential hydrocarbon bearing formations, they will also be run to cover the aquifer sands of the DeChelly formation. Cement production casing in two stages as per the Ten Point Drilling Plan.
  - a. Upon determination of commercial production, completion work will commence upon approval of Sundry Notice outlining procedures. Completion will include, MIRU completion rig, perforate, acidize and testing of each productive porosity zone.
  - b. ND BOPE, set 5-1/2" casing slips and cut off casing. Install wellhead.
- 11. If the well is determined not to be productive, the wellbore will be plugged as per BIA/BLM and State of Utah requirements.
- 12. Release drilling rig and move off of location. Note time of rig release on IADC tour report. Fence 4th side of reserve pit immediately upon rig move. Fill in rathole and mousehole after rig is gone.

#### HARKEN SOUTHWEST CORPORATION



Clay Hill Canyon 32-D Section 31-41S-25E Surface: 744' FNL & 378' FWL Subsurface: 467' FNL & 860' FWL

San Juan County, Utah



This well is to be drilled as an exploratory test. The test will be drilled to an approximate depth of 5,570' TVD ( $\pm$  5,680' MD) where it will TD in the top of the Akah formation. Subsurface conditions necessitate that this well be drilled as a directional hole. The surface location will be  $\pm$ 500' northeast of the bottom hole location.

#### 1. SURFACE FORMATION:

Geological name of the surface formation: Morrison

#### 2. ELEVATION:

Surface elevation is 4653' GL/4666' KB

#### 3. ESTIMATED TOPS OF GEOLOGICAL MARKERS:

See Attachment 1

#### ANTICIPATED FORMATIONS FOR WATER, OIL, GAS AND OTHER MINERALS:

Potential Waterbearing formations:

Navaio

DeChelly

Mineral bearing formations (Oil and/or Gas):

Upper Ismay

Lower Ismav

Desert Creek

Akah

#### 4. PROPOSED CASING/CEMENTING PROGRAM:

	DEPTH				
	<u>(MD)</u>	SIZE	WEIGHT	<b>GRADE</b>	<b>COUPLING</b>
Surface	425'	8-5/8"	24.0 ppf	K-55	STC
Production	5680'	5-1/2"	15.5 ppf	K-55	LTC

Clay Hill Canyon 32D Harken Southwest Corporation Ten Point Drilling Plan Page 2 of 4



#### SURFACE CEMENTING:

Surface to 425' with 305 sx Class "G" cement with 2%  $CaCl_2$  and 1/4 Ib/sx Celloflake. Weight = 15.8 ppg, yield = 1.15  $ft^3/sx$ . Total of 350  $ft^3$ . Slurry volume will be calculated to 100% excess over annular volume.

#### PRODUCTION CEMENTING:

#### Stage 1

TD ( $\pm$  5680' MD) to 3500' MD (Stage collar @  $\pm$  3500' MD). Lead with 173 sx Class "G" cement, 65:35 Pozmix with 6% gel and 1/4 lb/sx Celloflake. Weight = 12.7 ppg, yield = 1.85 ft<sup>3</sup>/sx. Tail with 100 sx Class "G" cement with 2% CaCl<sub>2</sub>. Weight = 15.8 ppg, yield = 1.15 ft<sup>3</sup>/sx. Total of 435 ft<sup>3</sup> with 15% excess.

#### Stage 2

3500' MD -Surface. Lead with 315 sx Class "G" cement, 65:35 Pozmix with 6% gel and 1/4 lb/sx Celloflake. Weight = 12.7 ppg, yield = 1.85 ft $^3$ /sx. Tail with 100 sx Class "G" cement with 2% CaCl $_2$ . Weight 15.8 ppg, yield 1.15 ft $^3$ /sx. Total of 697 ft $^3$  @ 15% excess.

NOTE: Exact slurry volumes for the production string will be adjusted according to the caliper log which will be run prior to cementing. Special adjustments may be necessary if significant amounts of salt are drilled.

#### **CENTRALIZERS:**

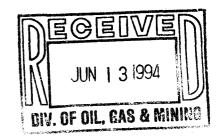
8-5/8" Surface String: Center of shoe jt, jt 3, jt 5, jt 7, and surface jt.

NOTE: Put asterisk pipe tally joint for each centralizer installed.

5-1/2" Production String: Center of shoe jt 1, jt 2, jt 4, jt 6, jt 8 and every third jt up to DV Tool @  $\pm$  3500'/ Four centralizers through DeChelly and two centralizers @ surface.

NOTE: Put asterisk on each pipe tally joint for each centralizer installed

Clay Hill Canyon 32D Harken Southwest Corporation Ten Point Drilling Plan Page 3 of 4



#### 5. BLOWOUT PREVENTER (See Attached Schematics)

As abnormal pressure is not anticipated, a 2000 psi BOP system would be sufficient for the drilling of this well. A 3000 psi system will be used, as per attached Exhibits "A" and "B". This will be a 10" x 900 series double ram preventer, equipped with a set o pipe and blind rams.

An accumulator system, with a pressure capacity sufficient to operate the rams three complete cycles without rig power, will be required as part of the rig equipment.

#### 6. PROPOSED MUD PROGRAM

Surface to ± 3200' MD

Fresh water, gel, lime and native soils. Weight 8.3 - 8.7 ppg. Gel/lime sweeps are necessary for hole cleaning.

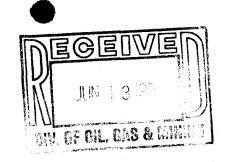
3200' MD - TVD (± 5570')

Low solids, non-dispersed polymer system. Weight 8.6 - 8.8 ppg. Gel/lime sweeps as hole conditions dictate for hole cleaning. Fluid loss to be maintained as 15cc or less. Fluid loss to be further reduced to 10 cc or less prior to coring, logging or DST's.

#### 7. AUXILIARY EQUIPMENT

- a. A kelly cock will be installed during drilling operations, with handle available on rig floor.
- b. Full Opening Safety Valves (FOSV) will be available on the rig floor at all times, with necessary subs to fit all of the drilling assemblies.
- c. Mud will be circulating fluid. No abnormal formation pressures are expected.

Clay Hill Canyon 32D Harken Southwest Corporation Ten Point Drilling Plan Page 4 of 4



#### 8. WELL EVALUATION

Electric Log Program:

DLL

TD to 4000'

Sonic (integrated)

TD to surface

**CNL-FDC Litho-Density** 

TD to 4000'

Micro-Log (Optional)

TD to 1000' above TD

Cores:

Sidewall cores are contingent on shows with two 60' cores planned.

DST:

Drill stem testing will be as per the well site geologist recommendations, based on shows. A mud logging unit will be utilized during drilling operations beginning at approximately 4200'MD.

#### 9. ABNORMAL PRESSURES/GAS

Abnormal pressures are not anticipated. monitoring of gas and hydrocarbon shows will be by wellsite mud logging unit. H<sub>2</sub>S gas is not anticipated.

#### 10. TIMING

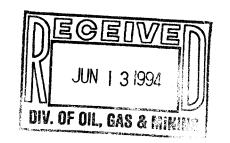
The drilling and evaluation of this well is estimated to be  $\pm$  18 days. Anticipated drilling will begin on or about July 15, 1994.

# HARKEN SOUTHWEST CORPORATION

#### SURFACE USE PLAN

Clay Hill Canyon 32D
Section 32-41S-25E
Surface: 744' FNL & 378' FWL
Subsurface: 467' FNL & 860' FWL

San Juan County, Utah



#### 1. EXISTING ROADS

The well location is situated approximately 16 miles southeast of Montezuma Creek, Utah by road, or  $\pm$  1.5 miles south of Lone Mountain (Utah). Attachment 2, is a topographic map showing the roads in the immediate area. Approximately 75' of new road will need to be built. Attachment 3, is a topographic vicinity map, showing the location in relation to the nearest town, village and landmark. All existing roads will be maintained in a good and passable condition during drilling operations.

#### 2. PLANNED ACCESS ROAD

Attachment 2, indicates approximately 75' of newly constructed road. The road will be maintained as necessary to prevent excessive damage to the existing terrain. All equipment and vehicles will be instructed to remain on the access road, well pad and areas specified. The road will be upgraded if commercial production is established.

#### 3. EXISTING WELLS

The proposed location is:

4000' northeast of Big Wash Field (Zollar and Danneberg Federal 116-1).

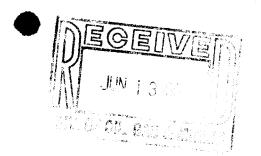
#### 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

Upon a successful commercial completion, all production facilities will be situated on the drilling location pad. Berm/dike or firewalls will be constructed around all storage facilities sufficient in size to contain liquid incase of rupture.

#### 5. LOCATION AND TYPE OF WATER

Water will be acquired from the San Juan river or McElmo Creek and will be hauled using third party contract water trucks.

Harken Southwest Corp. Surface Use Plan Page 2 of 5



#### 6. SOURCE OF CONSTRUCTION MATERIAL

The need for additional construction materials is not anticipated. In the event that additional materials are required, they will be acquired from private sources. No gravel or other related minerals from Federal/Navajo land will be used in construction of roads or wellsite without prior approval from the Surface Managing Agency.

#### 7. METHODS OF HANDLING WASTE MATERIAL

- a. The reserve pit will be designed to prevent the collection of surface runoff. The pit will be lined with a 7 mil liner, for containing drilling fluids. Prior to use, the reserve pit will be fenced on three side, the fourth side will be fenced at the time the drill rig is removed.
- b. Liquid hydrocarbons will be stored in temporary storage tanks and trucked to approved sales facilities.
- c. Garbage and other trash will be contained on location. It will be hauled to an approved disposal site or burned on location if a burning permit is obtained. Any trash on the pad will be cleaned up prior to the rig move off location.
- d. Sewage will be handled in self-contained, chemically treated portable toilets and the contents hauled off location to an authorized sanitary disposal facility.
- e. Upon completion of operations, fluids in the reserve pit will be allowed to evaporate or will be emptied. Upon drying, the pit will be backfilled and the area restored with the natural terrain.

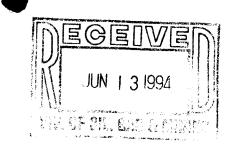
#### 8. ANCILLARY FACILITIES

There will be no ancillary facilities associated with this project, including camps.

#### 9. WELL SITE LAYOUT

- a. Well Pad Layout is detailed in Attachment 4.
- b. Cut and fill requirements due to topography are detailed in Attachment 4(a).

Harken Southwest Corp. Surface Use Plan Page 3 of 5



#### 9. WELL SITE LAYOUT (continued)

- c. Reserve pit will be fenced and lined as detailed in item 7(a).
- d. Soil material will not be pushed into drainage. All disturbed soil material will be place in an area where it can be retrieved for reclamation purposes.

#### 10. SURFACE RECLAMATION PLANS

- a. The reserve pit will be allowed to dry prior to the commencement of backfilling work. No attempts will be made to backfill the reserve pit until the pit is free of standing water. The reserve pit will remained fenced prior to reclamation.
- b. Rat and mouse holes will be filled and compacted from bottom to top immediately upon release of the drilling rig from the location.
- c. All remaining debris will be cleared from the location. Any materials not required for production operations will be removed.
- d. Areas of the well pad which are not needed for production operations will be reshaped as provided below:
  - 1. Unnatural backslopes and foreslopes will be reduced as practical and returned to natural contour.
  - 2. Compacted areas will be plowed or ripped to a depth of 12 to 16 inches prior to reseeding.
  - 3. Natural soil stock piled for reclamation activity will be utilized whenever possible. Additional topsoil will be obtained as necessary to return the terrain as near as possible to its original contour.
- e. In the event of a <u>dry hole</u>, the well site and newly constructed access road will be restored to their approximate original contour. Items d 1, 2 and 3 as listed above will be adhered to. In addition:

Harken Southwest Corp. Surface Use Plan Page 4 of 5



#### 10. SURFACE RECLAMATION PLANS (continued)

- 1. Care will be taken during reshaping of the pad and access road to insure there will be no depressions that will trap water or form ponds.
- 2. Seed mixture will be drilled to a depth of .5 to .75 inches or broadcast and followed by a drag or packer. Hand broadcasting may occur in areas to steep for machinery. If hand broadcast, the rate below will be 150%. Unless otherwise stipulated the following seed mix will be used:

Indian Ricegrass 3 lbs per acre PLS
Galleta 2 lbs per acre PLS
Needle-N-Thread 3 lbs per acre PLS
Four Winged Saltbrush 2 lbs per acre PLS

d. Reclamation operations for the well pad are expected to require approximately 7 to 10 days and will begin when the fluids in the reserve pit are dry for backfilling. Seeding will take place between July and September. If the well is a producer, restoration of unutilized portions of the location will commence as soon as practical after the installation of production facilities, but not later than 12 months after drilling is completed.

#### 11. SURFACE OWNERSHIP

The surface ownership at the well location and access road is Navajo Indian Reservation.

#### 12. BONDING

- a. Bond B03571 applies to operations within the State of Utah in favor of the United States Department of the Interior, Bureau of Land Management
- b. Bond BIA 14-20-603-373 has a Certificate of Deposit (#8015) held at Western Bank, Farmington, New Mexico as a performance bond
- c. All bonding under the name of Chuska Energy Company is currently being updated to Harken Southwest Corporation, pursuant to the name change as set out in the Amendment to the Articles of Incorporation dated 9/93.

Harken Southwest Corp. Surface Use Plan Page 5 of 5



Date: 5-31-94

#### 13. OTHER INFORMATION

- a. Cultural Resource approval granted to Chuska Energy Company in 1993 for the same location is attached for reference (Attachement 6).
- b. The spud report will be called into the BLM Farmington, New Mexico (505/327-5344) within 48 hours. Time and date of spud, along with BLM notification and contact, will be noted on drilling report.
- c. The BLM Farmington, New Mexico will be notified 24 hours in advance of BOP test.
- d. All undesirable events (fire, blowouts, spills, discharges) will be reported to the BLM Farmington, New Mexico within 24 hours (505/327-5344)

#### 14. REPRESENTATIVE AND CERTIFICATION

Field Representative -

Mr. Larry A. Chambers

Engineer

Harken Southwest Corporation 501 Airport Drive, Suite 158 Farmington, New Mexico 87401

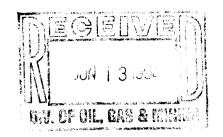
(505) 327-5531

#### Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and that the work associated with operations proposed here in will be performed by Harken Southwest Corporation and its contractors and subcontracts in conformity with this plan and the terms and conditions under which it is approved.

Marshall C. Watson, P.E. - Vice-President

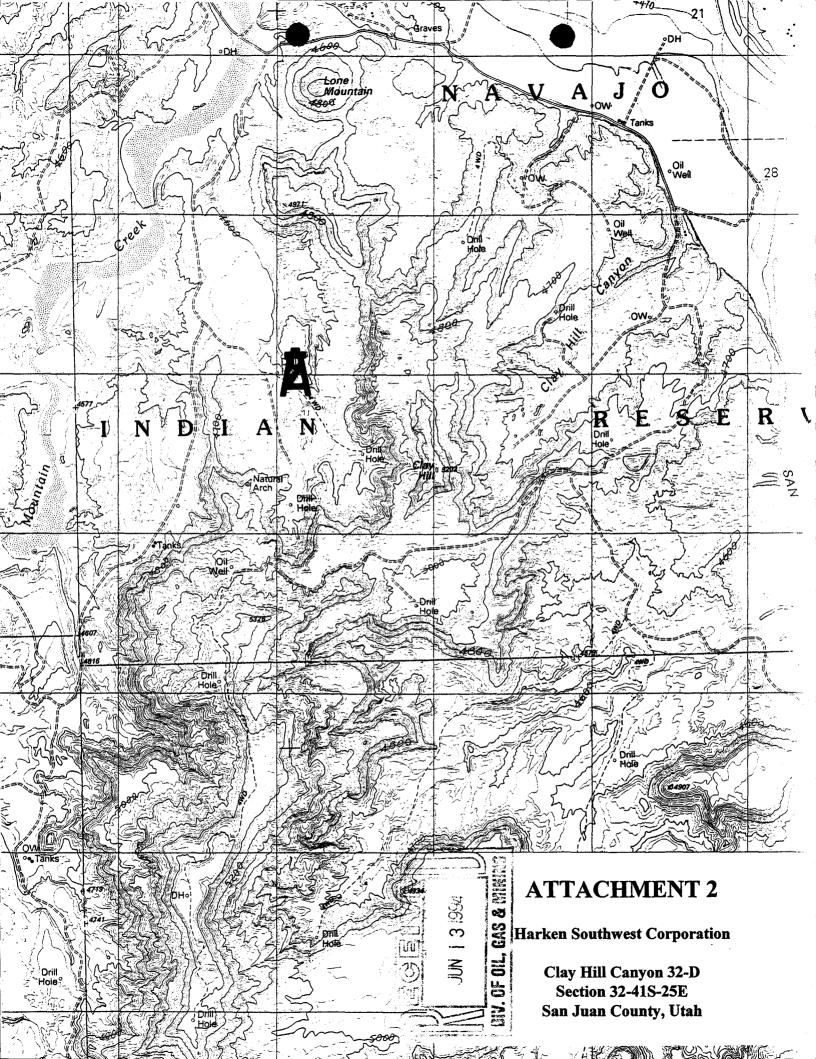
CLAY HILL CANYON 32-D NWNW SEC. 32 T41S R25E San Juan County, Utah

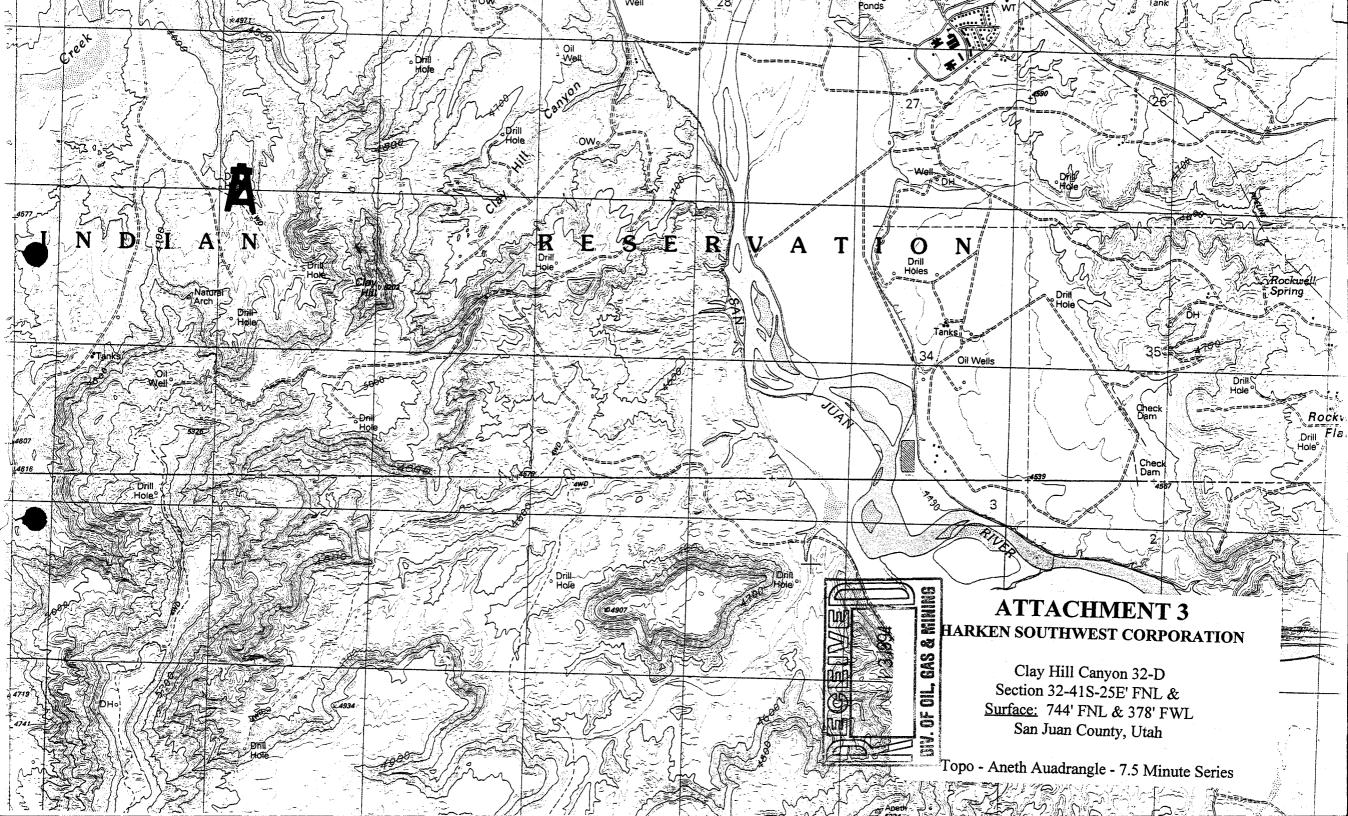


FORMATION	LITHOLOGY	MEASURED DEPTH	TVD	PROJECTED TOP SUBSEA
Morrison	Shale			Surface
Navajo	Sandstone	428	428	+4238
chinle	Shale/SltSt/SS	1068	1068	+3598
DeChelly	Sandstone	2043	2043	+2623
Organ Rock	SltSt/Sh/SS	2143	2143	+2523
Cedar Mesa	SltSt/Sh/SS	· 3243	3243	+1423
Hermosa	SltSt/Sh/SS	4354	4326	+340
Upper Ismay	LS/Dolo/Anhy	5229	5148	-428
Lower Ismay	LS/Dolo/Anhy	5352	5264	-598
Desert Creek	LS/Dolo/Anhy	5452	5358	-692 Primary Obj.
Akah	LS/Anhy/Salt	5622	5518	-852
Total Depth		5676	5568	-920

### HARKEN SOUTHWEST CORPORATION

Attachment 1

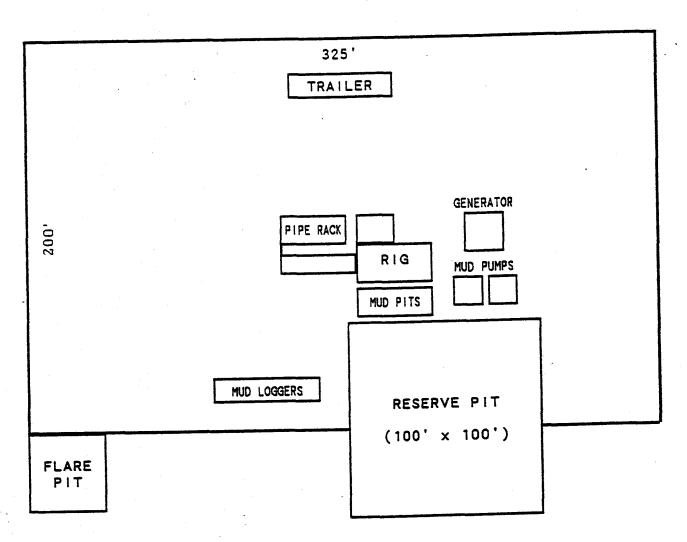




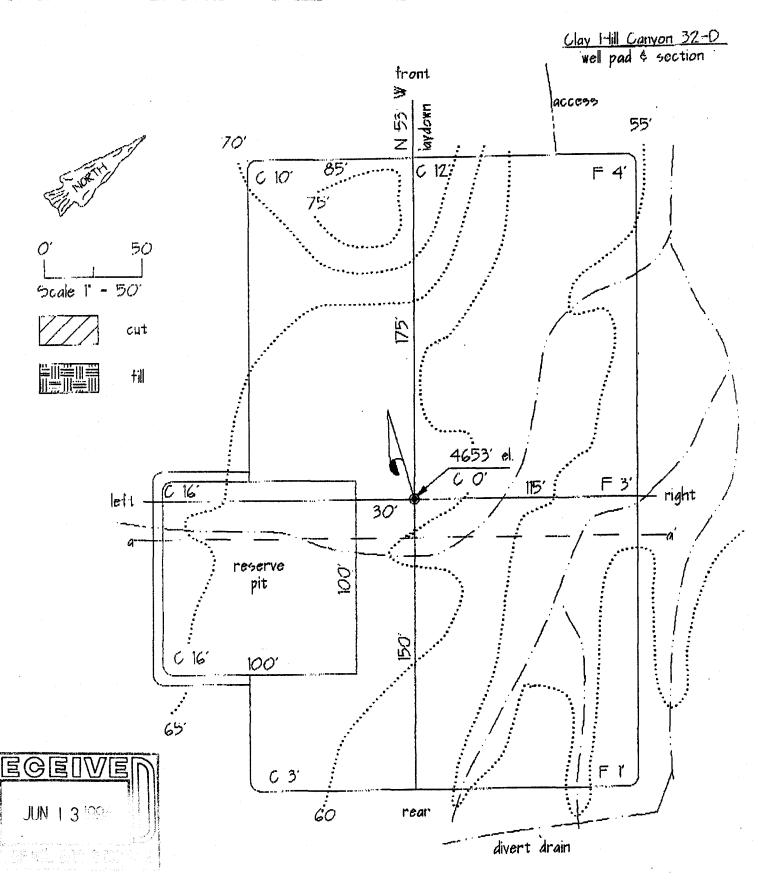
# HARKEN SOUTHWEST CORPORATION

Clay Hill Canyon 32-D Section 32-41S-25E Surface: 467' FNL & 860' FWL San Juan County, Utah

Attachment 4 Location Layout







HARKEN SOUTHWEST CORPORATION SEC.32-T41S-R25E

32-0 CLAY HILL CANYON SAN JUAN COUNTY UTAH.

#### PROPOSAL LISTING

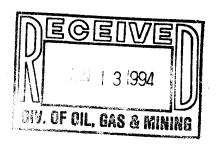
by Baker Hughes Inteq

Your ref : INITIAL PLAN Our ref : prop1342 License : CLAY HILL

Date printed : 6-May-94 Date created : 6-May-94 Last revised : 6-May-94

Field is centred on n37 40 0.000,w109 15 0 Structure is centred on 2668718.000,196481.000,999.00000,N

Slot location is n37 11 1.477,w109 12 15.942 Slot Grid coordinates are N 196481.000, E 2668718.000 Slot local coordinates are 0.00 N 0.00 E Reference North is True North

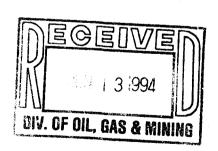


ATTACHMENT 5

#### HARKEN SOUTHWEST CORPORATION SEC.32-T41S-R25E,32-D SAN JUAN COUNTY,UTAN.

PROPOSAL LISTING Page 1 Your ref : INITIAL PLAN Last revised : 6-May-94

	Inclin.		True Vert.				Vert	
Depth	Degrees	Degrees	Depth	COORDI	NATES	Deg/100Ft	Sect	
0.00	0.00	56.03	0.00	0.00 N	0.00 E	0.00	0.00	-
428.00	0.00	56.03	428.00	0.00 N	0.00 E	0.00	0.00 NAVA	JO TOP
500.00	0.00	56.03	500.00	0.00 N	0.00 E	0.00	0.00	
1000.00	0.00	56.03	1000.00	0.00 N	0.00 E	0.00	0.00	
1068.00	0.00	56.03	1068.00	0.00 N	0.00 E	0.00	0.00 CHIN	LE TOP
1500.00	0.00	56.03	1500_00	0.00 N	0.00 E	0.00	0.00	
2000.00	0.00	56.03	2000.00	0.00 N	0.00 E	0.00	0.00	
2043.00	0.00	56.03	2043.00	0.00 N	0.00 E	0.00	0.00 DECH	ELLY TOP
2143.00	0.00	56.03	2143.00	0.00 N	0.00 E	0.00	0.00 ORGA	N ROCK TOP
2500.00	0.00	56.03	2500.00	0.00 N	0.00 E	0.00	0.00	
3000.00	0.00	56.03	3000.00	0.00 N	0.00 E	0.00	0.00	
3225.31	0.00	56.03	3225.31	0.00 N	0.00 E	0.00	0.00	
3243.00	0.35	56.03	3243.00	0.03 N	0.04 E	2.00	0.05 CEDA	R MESA TOP
3325.31	2.00	56.03	3325.29	0.98 N	1.45 E	2.00	1.74	
3425.31	4.00	56.03	3425.14	3.90 N	5.79 E	2.00	6.98	
3525.31	6.00	56.03	3524.76	8.77 N	13.01 E	2.00	15.69	
3625.31	8.00	56.03	3624.01	15.58 N	23.12 E	2.00	27.88	
3725.31	10.00	56.03	3722.77	24.32 N	36.09 E	2.00	43.52	
3825.31	12.00	56.03	3820.93	34.98 N	51.92 E	2.00	62.60	
3925.31	14.00	56.03	3918.36	47.55 N	70.57 E	2.00	85.10	
4025.31	16.00	56.03	4014.95	62.01 N	92.03 E	2.00	110.98	
4125.31	18.00	56.03	4110.57	78.35 N	116.28 E	2.00	140.21	
4225.31	20.00	56.03	4205.12	96.54 N	143.28 E	2.00	172.77	
4353.94	20.00	56.03	4326.00	121.12 N	179.76 E	0.00	216.76 HERM	IOSA TOP
4500.00	20.00	56.03	4463.25	149.04 N	221.19 E	0.00	266.72	
5000.00	20.00	56.03	4933.10	244.60 N	363.01 E	0.00	437.73	
5228.70	20.00	56.03	5148.00	288.30 N	427.88 E	0.00		R ISMAY TOP
5352.14	20.00	56.03	5264.00	311.90 N	462.90 E	0.00		R ISMAY TOP
5452.17		56.03	5358.00	331.01 N	491.27 E	0.00	592.38 DESE	RT CREEK
5500.00	20.00	56.03	5402.94	340.15 N	504.83 E	0.00	608.74	t a
5622.44	20.00	56.03	5518.00	363.55 N	539.56 E	0.00	650.62 AKAH	
5675.65	20.00	56.03	5568.00	373.72 N	554.66 E	0.00	668.81 TOTA	L DEPTH



HARKEN SOUTHWEST CORPORATION SEC.32-T41S-R25E,32-D SAN JUAN COUNTY,UTAH. PROPOSAL LISTING Page 2 Your ref : INITIAL PLAN Last revised : 6-May-94

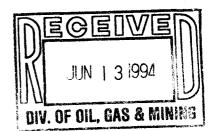
## Comments in wellpath

	MD	TVD	Rectangular	Coords.	Comment
	428.00	428.00	0.00 N	0.00 E	NAVAJO TOP
	1068.00	1068.00	0.00 N	0.00 E	CHINLE TOP
	2043.00	2043.00	0.00 N	0.00 E	DECHELLY TOP
	2143.00	2143.00	0.00 N	0.00 E	ORGAN ROCK TOP
	3243.00	3243.00	0.03 N	0.04 E	CEDAR MESA TOP
	4353.94	4326.00	121.12 N	179.76 E	HERMOSA TOP
	5228.70	5148.00		427.88 E	UPPER ISMAY TOP
	5352.14	5264.00		462.90 E	LOWER ISMAY TOP
	5452.17	5358.00	331.01 N	491.27 E	DESERT CREEK
	5622.44	5518.00		539.56 E	AKAH TOP
	5675.65	5568.00	373.72 N	554.66 E	TOTAL DEPTH

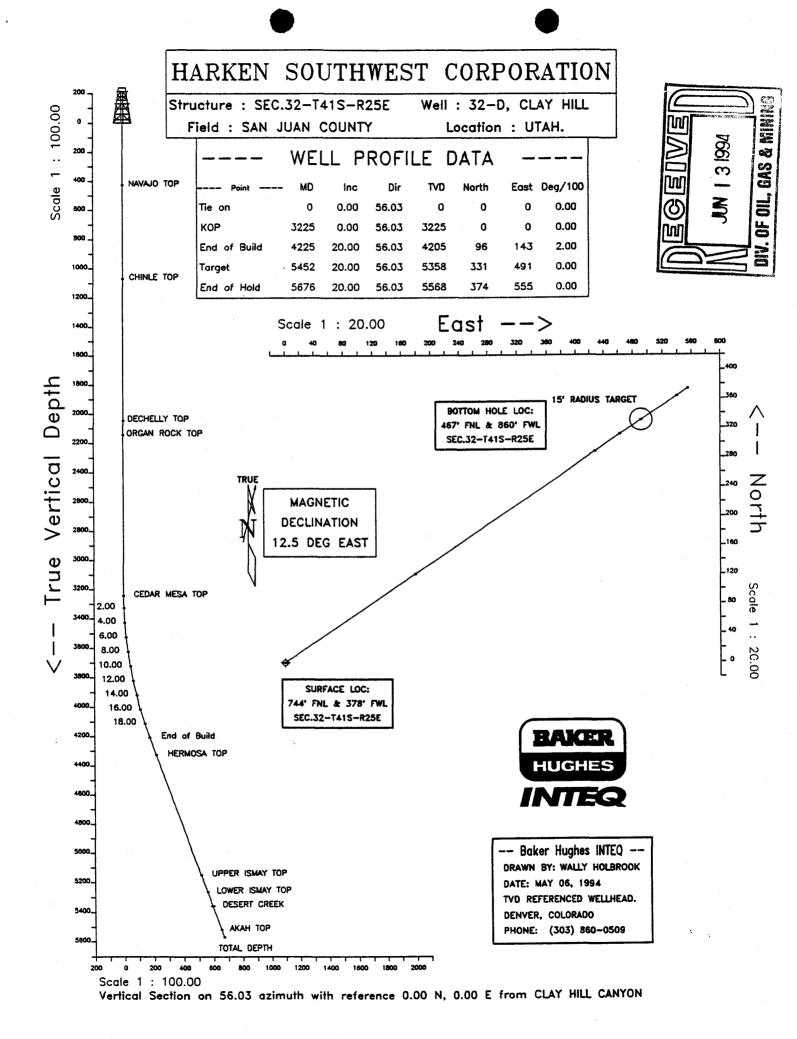
#### Targets associated with this wellpath

Target name Position T.V.D. Local rectangular coords. Date revised

DESERT CRK. CLAY HIL n37 11 4.750, w109 12 9.871,0 5358.00 331.01N 491.27E 6-May-94



All data is in feet unless otherwise stated
Coordinates from CLAY HILL CANYON and TVD from wellhead.
Bottom hole distance is 668.81 on azimuth 56.03 degrees from wellhead.
Vertical section is from wellhead on azimuth 56.03 degrees.
Declination is 12.32 degrees, Convergence is 1.41 degrees.
Calculation uses the minimum curvature method.
Presented by Baker Hughes Inteq



## CULTURAL RESOURCES COMPLIANCE FORM HISTORIC PRESERVATION DEPARTMENT PO BOX 2898



WINDOW ROCK, ARIZONA 86515

ROUTING:	COPIES TO	NNHPD NO. <u>HPD-93-390</u>
UT	SHPO	OTHER PROJECT NO.
	ACHP	4-CAS 9316
_X	REAL PROPERTY MGT/330	
	NNAD	
_X	4-CAS	

PROJECT TITLE: Cultural Resource Survey of Chuska Energy Company's Clay Hill Canyon 32-D Well Pad Navajo Nation, San Juan County, Utah

LEAD AGENCY: BIA/NAO

SPONSOR: Chuska Energy Company, 3315 Bloomfield Hwy., Farmington,

NM 87401

PROJECT DESCRIPTION: Clay Hill Canyon 32-D well pad

Tribal Trust LAND STATUS:

CHAPTER: Red Mesa

LOCATION: T41S, R25E, Section 32 (in part) San Juan County, UT

PROJECT ARCHAEOLOGIST: Carol DeFrancia NAVAJO ANTIQUITIES PERMIT NO.: B9360-I

DATE INSPECTED: 7/9/93 DATE OF REPORT: 7/12/93 TOTAL ACREAGE INSPECTED:

10

Class III pedestrian inventory with METHOD OF INVESTIGATION:

transects spaced 15 m apart.

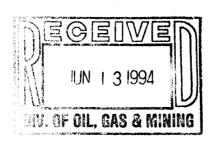
LIST OF CULTURAL RESOURCES FOUND:

LIST OF ELIGIBLE PROPERTIES: None

LIST OF NON-ELIGIBLE PROPERTIES: None

LIST OF ARCHAEOLOGICAL RESOURCES: None

EFFECT/CONDITIONS OF COMPLIANCE: No properties were located. Pursuant to 36 CFR 800.4(d), a copy of this form and the report have been provided to the SHPO notifying them that no properties were found.



ATTACHMENT 6

In the event of a discovery ["discovery" means any previously unidentified or incorrectly identified cultural resources including but not limited to archaeological deposits, human remains, or associated with Native American reportedly religious/traditional beliefs or practices], all operations in the immediate vicinity of the discovery must cease and the Navajo Nation Historic Preservation Department must be notified 602-871-7132.

FORM PREPARED BY: Jane King FINALIZED: ldavis8/24/93

Notification to

Proceed Recommended: Conditions:

Yes <u>X</u> No No

\_X\_

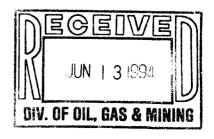
Navajo Nation Historic Preservation Officer 8/3/93

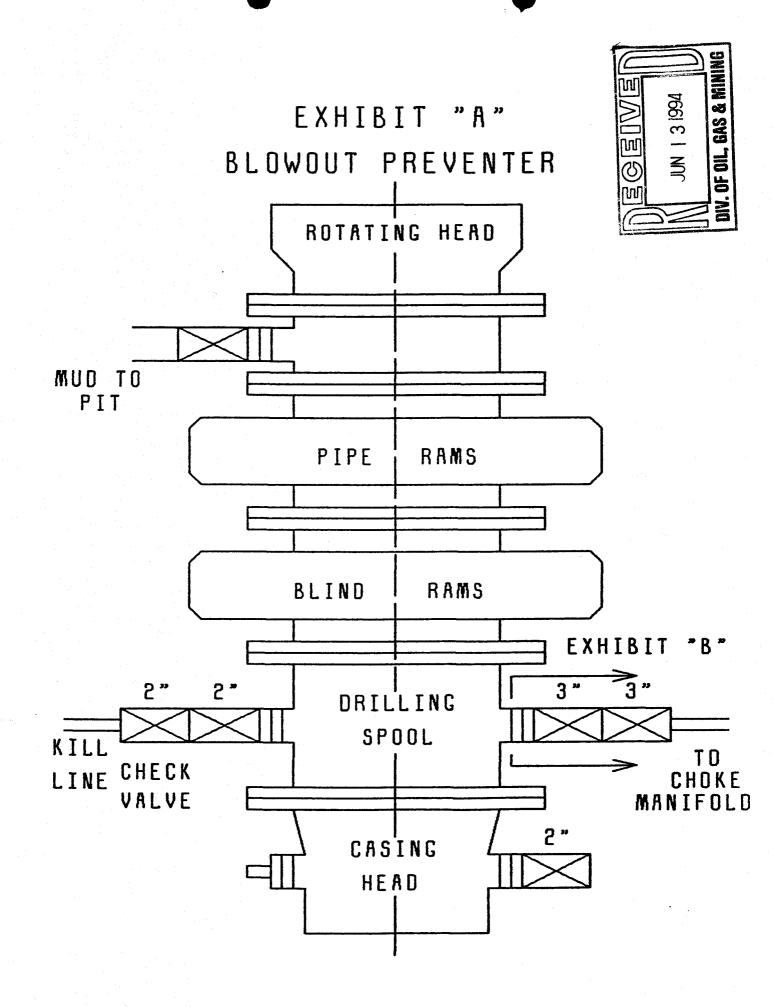
Agency Approval:

Yes

Area Director

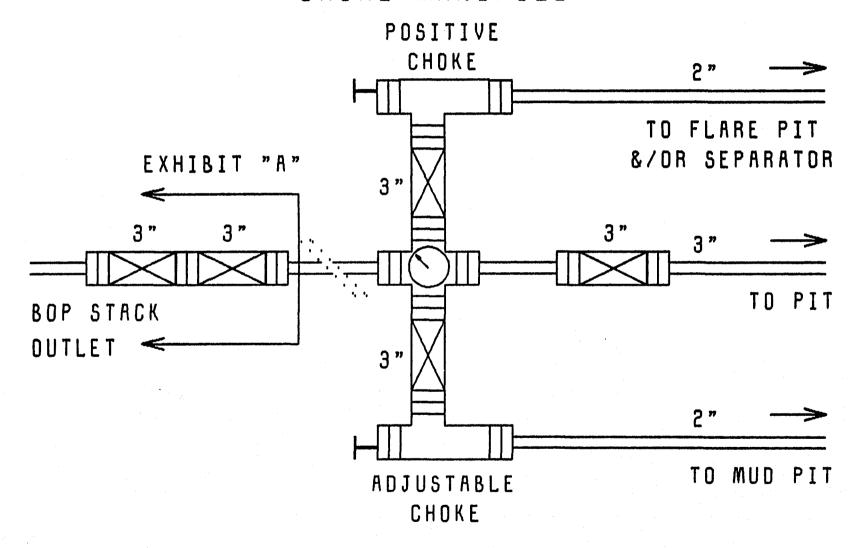
Date







# EXHIBIT "B" CHOKE MANIFOLD



# WORKSHEET APPLICATION FOR PERMIT TO DRILL

API NO. ASSIGNED: 43-037-31741
(N9290)
INSPECT LOCATION BY: / / TECH REVIEW Initials Date Engineering Geology Surface
LOCATION AND SITING:  R649-2-3. Unit: R649-3-2. General.  R649-3-3. Exception.  Drilling Unit.  Board Cause no: Date:
CONFIDENTIAL PERIOD EXPLISED ON 10 20
Stepuletini

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		2011				
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CALY I	ILL 32D	<b>⊕</b> ^ ♦3				
SOW PA	PROPOSI SURFACI	D PA 33	I CLAY I	35	36	
DSCH	PA CLAY HII		HILLS			

R 25 E

SAN JUAN COUNTY

#### STATE OF UTAH

Operator: HARKEN SOUTHWEST CORP. | Well Name: CLAY HILL CANYON 32D

Project ID: 43-037-31741 | Location: SEC. 32 - T41S - R25E

Design Factors: Design Parameters: : 1.125 Collapse Mud weight (8.70 ppg) : 0.452 psi/ft : 1.00 Burst : 2252 psi Shut in surface pressure : 1.80 (J) Internal gradient (burst) : 0.055 8 Round psi/ft **Buttress** : 1.60 **(1)** Annular gradient (burst) : 0.000 psi/ft Other : 1.50 (J) Tensile load is determined using air weight : 1.50 (B) Body Yield Service rating is "Sweet"

	Length (feet)	Size (in.)	Weight (lb/ft)	Grade	e Joir		Depth (feet)	Depth (TVD)	Cost
1	5,800	5.500	15.50	K-5	5 ST&C	2	5,800	5,680	
	Load (psi)	Collapse Strgth (psi)	S.F.	Burst Load (psi)	Min Int Strgth (psi)	Yield S.F.	Load	Tension Strgth (kips)	S.F.
1	2567	4040	1.574	2567	4810	1.87	89.90	222	2.47 J

Prepared by: FRM, Salt Lake City, UT

Date : 08-24-1994

Remarks :

DEVIATED HOLE

Minimum segment length for the 5,800 foot well is 1,000 feet.

SICP is based on the ideal gas law, a gas gravity of 0.69, and a mean gas

temperature of 102°F (Surface 74°F, BHT 131°F & temp. gradient 1.000°/100 ft.)

Minimum drift diameter of this directional well string is 4.825 in. Other

parameters include: TD (Meas): 5,800 ft. Departure @ TD: 725

KOP: 3,225 ft. BU α: 2.000°/100 ft.

a 1st Slant α: 20.525° VD: 4,229 ft Departure: 182 ft MD: 4,251 ft

Bending load: 10.74 kips

The mud gradient and bottom hole pressures (for burst) are 0.452 psi/ft and 2,567 psi, respectively.

NOTE: The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1987 pricing model. (Version 1.06)



# DIVISION OF OIL, GAS AND MINING

355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203 801-538-5340 801-359-3940 (Fax)

August 24, 1994

Harken Southwest Corporation P.O. Box 612007 Dallas, Texas 75261

Clay Hill Canyon 32D Well, Surface Location 744' FNL, 378' FWL, Bottom Hole Location 467' FNL, 860' FWL, NW NW, Sec. 32, T. 41 S., R. 25 E., San Juan County, Utah

#### Gentlemen:

Pursuant to Utah Admin. R. 649-3-2, Location and Siting of Wells and Utah Admin. R. 649-3-4, Permitting of Wells to be Drilled, Deepened or Plugged-Back, approval to horizontally drill the referenced well is hereby granted.

In addition, the following specific actions are necessary to fully comply with this approval:

- In accordance with Utah Admin. R. 649-3-11, Directional Drilling, submittal 1. of a complete angular deviation and directional survey report is required.
- 2. Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules.
- Notification to the Division within 24 hours after drilling operations 3. commence.
- 4. Submittal of Entity Action Form, Form 6, within five working days following commencement of drilling operations and whenever a change in operations or interests necessitates an entity status change.
- 5. Submittal of the Report of Water Encountered During Drilling, Form 7.
- 6. Prompt notification prior to commencing operations, if necessary, to plug and abandon the well. Notify Frank R. Matthews, Petroleum Engineer, (Office) (801)538-5340, (Home) (801)476-8613, or K. Michael Hebertson, Reclamation Specialist, (Home) (801)269-9212.



Page 2 Harken Southwest Corporation Clay Hill Canyon 32D Well August 24, 1994

7. Compliance with the requirements of Utah Admin. R. 649-3-20, Gas Flaring or Venting, if the well is completed for production.

This approval shall expire one year after date of issuance unless substantial and continuous operation is underway or a request for an extension is made prior to the approval expiration date. The API number assigned to this well is 43-037-31741.

Sincerely,

Associate Director

ldc

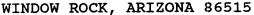
Enclosures

cc: San Juan County Assessor

Bureau of Land Management, Moab District Office

WOI1

### CULTURAL RESOURCES COMPLIANCE FORM HISTORIC PRESERVATION DEPARTMENT PO BOX 2898



ROUTING:	COPIES TO	NNHPD NO. 94-561
UT	SHPO	OTHER PROJECT NO.
	ACHP	4-CAS 9420
X	REAL PROPERTY MGT/330	
	NNAD	
X	4-CAS	

PROJECT TITLE: Cultural Resource Survey of Harken Southwest Corporation's Clayhill Canyon 32-D Pipeline Route Navajo Nation, San Juan County, Utah

LEAD AGENCY: BIA/NAO

SPONSOR: Harken SW Corporation, 501 Airport Drive, Farmington, New Mexico 87401

PROJECT DESCRIPTION: Construction of a pipe line extending 3680 ft. from the location and ties to Harken SW Corporation's existing Hillside North lateral - Aneth Oil Field, San Juan County, Utah.

LAND STATUS: Tribal Trust

CHAPTER: Red Mesa

LOCATION: T41S, R25E, Section 30, 31, 32; San Juan County, Utah

PROJECT ARCHAEOLOGIST: Carol S. DeFrancia NAVAJO ANTIQUITIES PERMIT NO.: B9360-I3

DATE INSPECTED: 8/11/94
DATE OF REPORT: 8/12/94

TOTAL ACREAGE INSPECTED: 12.6

METHOD OF INVESTIGATION: Class III pedestrian inventory with transects spaced 15m apart.

LIST OF CULTURAL RESOURCES FOUND: None

LIST OF ELIGIBLE PROPERTIES: None

LIST OF NON-ELIGIBLE PROPERTIES: None

LIST OF ARCHAEOLOGICAL RESOURCES: None

EFFECT/CONDITIONS OF COMPLIANCE: No properties were located. Pursuant to 36 CFR 800.4(d), a copy of this form and the report have been provided to the SHPO notifying them of compliance with CMY-19-88.

In the event of a discovery ["discovery" means any previously unidentified or incorrectly identified cultural resources including but not limited to archaeological deposits, human remains, or locations reportedly associated with Native American religious/traditional beliefs or practices], all operations in the immediate vicinity of the discovery must cease and the Navajo Nation Historic Preservation Department must be notified 602-871-7132.

FORM PREPARED BY: Iris Begaye

FINALIZED: 8/31/94

Notification to

Proceed Recommended:

Conditions:

Yes x No x

Alan Downer

Navajo Nation Historic Preservation Officer

Date/

Agency Approval:

Yes // No \_\_\_

Trector\_

Date



# DIVISION OF OIL, GAS AND MINING

## SPUDDING INFORMATION

Name of Company: HARKEN SOUTHW	EST			
Well Name: <u>CLAY HILL CANYON</u>	32D			
Api No. 43-037-31741				
Section 32 Township 41	S Range_	25E	County_	SAN JUAN
Drilling Contractor UNITED	DRILLING			
Rig #				•
SPUDDED: Date 2/1/95				
Time_8:00 AM				
How_ROTARY				
Drilling will commence				
Drilling will commence			_	
Reported by ROCHELL MONTGOMERY			- -	
Telephone # 1-214-753-6900		<u> </u>	_	
		•		
	Signed:	MKH		

OPERATOR	Harken Southwest Corporation
	P 0 Box 612007

OPERATOR ACCT. NO. <u>N 9290</u>

ADDRESS P. O. Box 61

Dallas, TX 75261-0007

ACTION	CURRENT	NEH	APT NUMBER	WELL NAME				WELL	LOCATIO	Ŋ	SPUD	EFFECTIVE
CODE	ENTITY NO.	ENTITY NO.				90	sc	TP	RG	COUNTY	DATE	DATE
A	199999	1 11 127	43-037-31741	Clay Hill Canyon 32D		NW	32	41S	25E	San Juan	02/01/95	
HELL 1 C	OMMENTS:	F. /:	ly adoled 26	95 P					· · · · · · · · · · · · · · · · · · ·		• *	
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ß	- Add new v	well to exis	for new well (si ling entity (grou	p or unit well)			- F1	7 7 5	1	Signature	O Conces	pracy
מ	- Re-assion	i well from	one existing entione existing entions in the existing ention (numerical ention)	ty to another existing entity ty to a new entity		E G	<u> </u>	<u> </u>	Mille	oduction	amin	<u>4219</u> Date
HOTE: U	Jse COMMENT	section to	explain why each	Action Code was selected.	13	FEB	- 3 19	95		Plione No.	214, 753	-6900
(3/89)						( L.U	J 10		A STATE OF THE STA			
							GAS	& MIN	ING	ı		
					4.7	سأازات	g Bank of the bank.	PETICIO ANDELLE SERVERE PETE	CALIFORNIA MARCHAN	ı		

#### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993

5. Lease Designation and Serial No.

14-20-603-373 (BIA) 6. If Indian, Allottee or Tribe Name

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals

7. If Unit or CA, Agreement Designation

Navajo

**New Construction** 

Water Shut-Off

Non-Routine Fracturing

SUBMIT	IN TRIPLICATE	
1. Type of Well  XXX Well Gas Well Other  2. Name of Operator  Harken Southwest Corporation  3. Address and Telephone No.  P. O. Box 612007, Dallas, TX  4. Location of Well (Footage, Sec., T., R., M., or Survey Des  Surface: NW/NW Section 32-4  744' FNL & 378' FX	75261 (214) 753-6900 scription) 41S-25E	N/A  8. Well Name and No. Clay Hill Canyon 32D  9. API Well No. 43-037-31741  10. Field and Pool, or Exploratory Area Wildcat  11. County or Parish, State San Juan County, UT
CHECK APPROPRIATE BOX(s	s) TO INDICATE NATURE OF NOTICE, REPO	ORT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTIO	N
——————————————————————————————————————	Abandonment	Change of Plans

Conversion to Injection Final Abandonment Notice Notice of Spud Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.) 13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled,

Abandonment

Recompletion

Plugging Back

Casing Repair

The subject well was spudded at 1400 hrs on February 1, 1995.

give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Casing string was set as follows:

Notice of Intent

XXX Subsequent Report

CONFIDENTIAL Run 9 jts (413.95') 8-56", 24.0#, J-55, 8rd, ST&C, set @ 426'. RU Halliburton, cmt w/310 sx Class "B" w/2% CaCl<sub>2</sub>, 1/4 #/sx flocele, yeild 1.18 ft<sup>3</sup>, 15.6 PPG, displ w/24.5 bbl H<sub>2</sub>O, circ 15 bbls to surface. Plug down @ 4:25 am. 02/02/95. Operations @ report time: WOC

NOTE: BLM Inspector, Johnny Bennett, on location 2/1/95.

CC: State of Utah 14. I hereby gertify that the foregoing/i DIV OF OIL, GAS & MINING 02/02/95 (This space Title Approved by Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993
ease Designation and Serial No.

SUNDRY NOTICES	AND REPORTS ON WELLS	6. If Indian, Allottee or Tribe Name
Do not use this form for proposals to dri	Il or to deepen or reentry to a different reservoir.	Navajo
	IN TRIPLICATE	7. If Unit or CA, Agreement Designation
	IN TRIPLICATE	N / A
1. Type of Well		N/A 8. Well Name and No.
Other Other		Clay Hill Canyon 32D
2. Name of Operator Harken Southwest Corporation		9. API Well No.
3. Address and Telephone No.		43-037-31741
P. O. Box 612007, Dallas, Tex	as 75261 (214) 753-6900	10. Field and Pool, or Exploratory Area
4. Location of Well (Footage, Sec., T., R., M., or Survey D		Wildcat
_	( a	11. County or Parish, State
744' FNL & 378' FWL - NWNW	Sec. 32-41S-25E	San Juan, Utah
12. CHECK APPROPRIATE BOX	s) TO INDICATE NATURE OF NOTICE, REPO	ORT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION	V
X Notice of Intent	Abandonment	Change of Plans
Emil Notice of Intelle	Recompletion	New Construction
Subsequent Report	Plugging Back	Non-Routine Fracturing
	Casing Repair	Water Shut-Off
Final Abandonment Notice	Altering Casing	Conversion to Injection
	X Other <u>Completion</u>	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
13. Describe Proposed or Completed Operations (Clearly state	all pertinent details, and give pertinent dates, including estimated date of start	ing any proposed work. If well is directionally drilled,
give subsurface locations and measured and true vert	ical depths for all markers and zones pertinent to this work.)*	
Attached please find the completion	n procedures for the subject wellbore.	
The well reached TD on 02/15/95. (	On 2/17-18/95 casing was set as follows: Ran 129 jts (56	45.97') 5-1/2" 15.5#, K-55,
8 rd LT&C csg Set @ 5663', FC @	9 5616', stage collar @ 4482'. RU Halliburton, circ. Cer	ment 1st stage, pumped 20
bbl mud flush & 10 bbl wtr ahead, n	nixed 139 sx Class "G" cmt w/5# per sx gilsonite, 1/4# per	sx Flocele, .3% Halad 304,
vield 1.22 cf/sx, 15.4 ppg, displ w	//30 bbl H <sub>2</sub> O, 106 bbl mud, did not bump plug, float l	neld, <u>circ 6 bbl cmt to pit</u> .
Dropped bomb, opened stage tool (	@ 1250 psi, circ for 2nd stage. Cement 2nd stage, pun	nped 20 bbl mud flush and
10 bbl H <sub>2</sub> O ahead, mix 625 sx Class	"B" cmt w/5# per sx gilsonite, ¼#/sx Flocele, yield 1.8	8 ft <sub>3</sub> /sx, 12.4 ppg followed
by 100 sx Class "B" cement w/5# pe	r sx gilsonite, 1/4#/sx Flocele, yield 1.18 cf/sx, 15.6 ppg, c	lispl w/108 bbl H <sub>2</sub> O, closed
	.m., circ 5 bbl cmt to pit. PU BOP set slips, 2:30a.m8:	30a.m. RD, clean mud pit.
Released Rig @ 8:30 a.m. 02-18-9	5.	
Should any questions arise, please c	ontact the undersigned or Marshall Watson at the address	s/telephone number above.
		at a tarata ata ata ata
// \ ****** Pleas	e consider this submittal CONFIDENTIAL	CC CC CIA-l
		CC: State of Utah
14. The say certify that the foregoing is true and correct		
signed Koutgames	Tide Production Administrator	Date <u>3/01/95</u>
(This space for Federal of State office use)		· · · · <u>-</u>
Approved by Conditions of approval, if any:	/ Title	Date

### **COMPLETION PROGNOSIS**

# CLAY HILL CANYON 32D 744' FNL & 378' FWL (SURF) (SEE ATTACHED PLAT FOR BHL LOCATED 555', 60° FROM NORTH) SEC 32 T41S R25E SAN JUAN COUNTY, UTAH

**Present Status:** 

Waiting on completion

Elevation:

4652' (GL)

Reference Elevation: 4665' (KB)

13' above GL

Total Depth/PBTD:

5665' (MD)

PBTD: 5616' (MD)-Float collar,

5569' (TVD)

4482' (MD)-DV tool

Hole Size:

7-7/8"

Casing Program:

8 5/8 24# set @ 426', cmt to surface

5 1/2" 15.5# set @ 5663' cmt in two stages. DV tool @ 4482'

Stage 1:

Cmt with 139 sx (170 cf) got 6 bbls above DV tool.

Did not bump plug, but float held.

Stage 2:

Cmt w/725 sx (1293 cf)

Reference Log:

Main Pass HLS Spectral Density/Dual Spared Neutron dated

2/14 /95 - ALL REFERENCED DEPTHS IN PROG ARE

MEASURED DEPTHS AND RELATIVE TO KB

#### Casing and Planned Tubing Detail

Depth	Size (in)	Wt.#/ft		Burst (psi)	Collapse (psi)	Yield M#		Capacity (bbls/ft)
Not in hole	2-7/8	6.5	J-55 EUE	7260	7680	99	2.347	0.00579
surf- 5663	5-1/2	15.50	K-55 LTC	4810	4040	202	4.825	0.0232

### Completion Prognosis Clay Hill Canyon 32D Page 2

## Proposed Operations: Complete as new Desert Creek Producer and obtain pressure/rate data from all zones simultaneously (commingled)

- 1. Hold safety meeting and review procedures w/rig crew.
- 2. MIRU completion rig. Rig to include reversing and circulation system.
- 3. NU BOP. Pressure test to 1,500 psig using rig pump.
- 4. PU 4-7/8" bit, 4 x 3-1/2" drill collars and 2-7/8" tubing. RIH to DV collar at +/-4482' MD(KB).
- 5. Close tubing rams and pressure test casing above DV collar to 1,500 psig for 15 minutes.
- 6. Drill out DV collar using fresh water as circulating fluid.
- 7. Continue RIH and clean out to float collar at +/-5616' (MD)KB.
- 8. Close tubing rams and pressure test casing to 1,500 psig for 15 minutes.
- 9. Circulate hole clean with fresh water. Continue until returns are free of cement.
- 10. POH with completion string.
- 11. PU 5-1/2" casing scraper. RIH with 4-7/8" bit, scraper, 4 x 3-1/2 drill collars and 2-7/8" tubing to float collar at +/- 5616' KB. Circulate hole clean and POH with completion string.
- 12. LD bit, casing scraper, and collars.
- 13. RU HLS wireline and run CBL/VDL/CCL/GR from PBTD to +/-5200' MD (KB) (approximately 100' above the Upper Ismay) with 0 psig on CSG. Correlate bond log to referenced log (HLS/SDL/DSN/GR Main Pass dated 2/14/95). Pressure up to 1000 psi on CSG. GIH to PBTD and run CBL/VDL/CCL/GR to surface. Fax CBL/CCL/GR log to Dallas office and wait on approval prior to proceeding.

NOTE: All flow from the well will be into temporary frac tanks. Under no circumstances will fluids flowing from the well be produced into the reserve pit.

### Completion Prognosis Clay Hill Canyon 32D Page 3

14. RU to perforate. Note that GR/CCL is on depth with referenced log (HLS Main Pass SDL/DSN/GR dated 2/14/95). Using 4" hollow carrier casing gun, perforate at 4 SPF w/90 degree phasing/0.45" diameter (perforations) the following intervals from bottom to top:

ZONE	INTERVAL	LENGTH	NO. OF SHOTS	FEET OF POROSITY	ACID VOLUME @ 150 G/FT
4	5491-5494	3'	13	3	450
4	5497-5503	6'	25	5	750
3	5514-5520	6'	25	6	900
2	5528-5531	3'	13	2	300
1	5537-5541	4'	17	4	600
1	5544-5549	5'	25	5	750
TOTALS		27	118	25	3750

NOTE: Report fluid level drop to Dallas office for orders to RU and swab for flow test (see step 23).

PU tandem Microsmart Electronic Pressure Gauge bombs (1.25" OD) housed in 2-7/8" x 14' perforated bull plugged sub, collar locator, PPI packer (1.8" ID) with 10 foot spacing between elements, 2-7/8" x 4' PU sub, 1 jt. 2-7/8" tbg, 2-7/8" SN (2.205 ID) and RIH on 2-7/8" tubing to 5300' MD (KB) and set packer and pressure test elements to 1,500 psig. Unseat packer and GIH to 1st setting shown in Step 16.

16. Spot heated 15% HCl NEA to bottom of tubing. A total of 3750 gal (150 gal/ft) of acid will be used for the Matrix acid job as follows at pump rates and pressures of 1/2 BPM and approximately 2700 psi: (Max pressure on break down 3500 psi).

SETTING DEPTH, MD (KB)	VOL ACID, GAL.
5543-5553	750
5532-5542	600
5524-5534	300
5512-5522	900
5496-5506	750
5485-5595	450
	3750 GALS

Tbg. capacity to 5595 = 32.4 BBLS (1361 gal.)

- 17. After acid set packer and pull standing valve. Swab well back until cleaned up and flow test through test separator to obtain fluid and gas flow rates and pressures. Report data to Dallas office and will advise to proceed. Report data to Dallas, will advise on SI.
- 18. After flow test is completed, TOH, LD packer, and electronic gauges.
- 19. If well is not capable of sustained flow go to Step 21. If well is capable of flowing, PU a 2-7/8" x 31' tail joint, 5-1/2 x 2-7/8 x 3 Model 'R' Completion packer, 2-7/8 SN and RIH on 2-7/8 tbg to 5400' KB. Circulate packer fluid containing corrosion inhibitor down back side to packer and set.
- 20. Swab well to unload allow to clean up and flow test. Go to step 22.
- 21. A. If well is unable to flow, RIH with 2-7/8 x 31 open ended tail joint and 2-7/8 SN on 2-7/8 tbg to PBTD at 5616' MD (KB). PU 2 ft off bottom and swab until well is cleaned up.
  - B. Hot oil down the with 30 bbl lease oil plus 3 gallons paraffin inhibitor. RIH with tear drop SV on sand line and pressure test the to 1000 psig. If okay, make minimum of 4 swab runs to clean up rat hole. POOH standing back the.

### Completion Prognosis Clay Hill Canyon 32D Page 5

C. RIH with BHA as follows:

2-7/8 x 31 tail joint perforated 5' on bottom 2-7/8 collar with 2-3/16" holes 2-7/8 SN 7 jts 2-7/8 tbg 5-1/2 x 2-7/8 TAC 171 jts 2-7/8 tbg

- D. Land EOT at +/-5603' MD (KB) and pump 15 bbl lease oil down back side.
- E. Set TAC in 13,500 psi tension, ND BOP, and NU WHD.
- F. Complete well for final pump installation.

#### Pump Installation

Production Material Requirements:

185 jts 2-7/8 tbg

5-1/2 x 2-7/8 TAC w/35K shear pin

2-7/8 collar w/2-3/16" holes

2-7/8 SN

2-7/8 tail joint perforated 5' on bottom

\*Following is estimated based on 100 BPDTF

 $2-1/2 \times 1-1/4 \times 15$  RHAC

2075'-83: 7/8 x 2-7/8 x 6 per scrapered Type 78 Rods

3500'-140: 3/4 x 2-7/8 x 6 per scrapered Type 78 Rods

 $1-1/2 \times 26$  SM polish rod

5 gallon can of corrosion inhibitor

set of torque cards

G. RU rod table and rod tongs. Calibrate makeup torque on tongs using torque cards.

### Completion Prognosis Clay Hill Canyon 32D Page 6

H. RIH w/following pump and three taper scrapered rod string using corrosion inhibitor on pins and boxes:

1 - 2-1/2 x 1-1/4 x 15 RHAC 1- 3/4 x 2 pony rod 16 - 400' 7/8 x 2-7/8-6 per x 25 rods 139- 3500' 3/4 x 2-7/8-6 per x 25 rods 66 - 1675' 7/8 x 2-7/8-6 per x 25 rods 1 - 1-1/2 x 26 SM polish rod

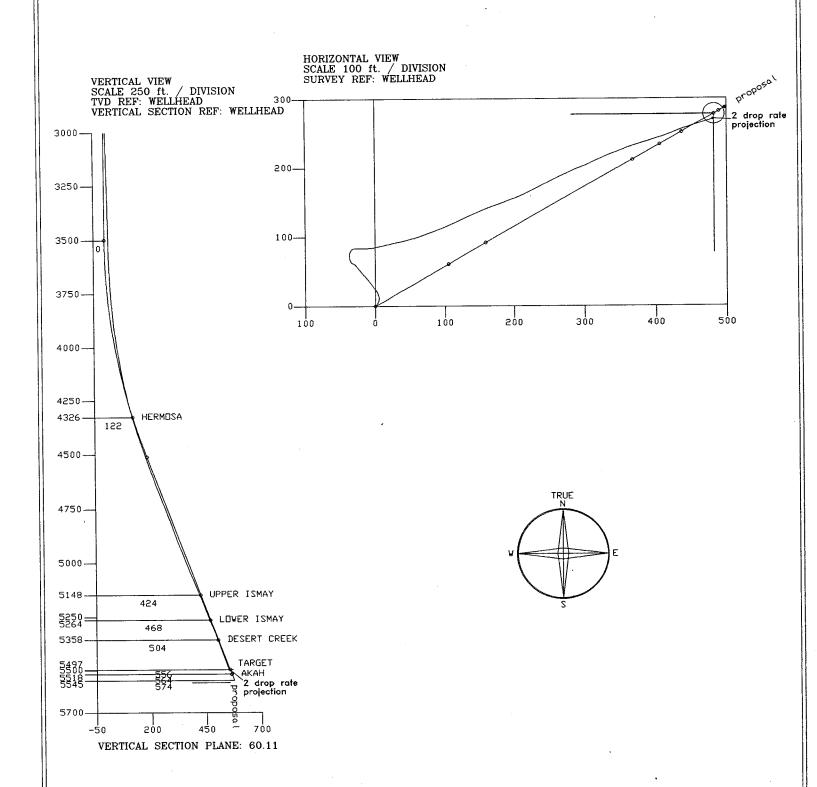
- I. Space out pump and hang off on C160-200-74 pumping unit, SL=74", SPM=to be determined (probably start at 5SPM).
- J. Load tbg with 32 bbl oil and pressure test tbg to 400 psig. Check pump action. Release rig.
- 22. Production test well for 5-10 days through test facilities to determine proper sizing of facilities.
- 23. Complete well facility installation and pipeline.

#### NOTE:

- (1) Wellsite Engineer to account for and report on Daily Completion Report all fluids injected into and removed from wellbore during work over operations.
- (2) Dallas office will submit squeeze procedures if required during the completion of said well.
- (3) Swabbing operations will only be conducted during daylight hours, or if sufficient rig lighting is available to swab in complete safety.
- (4) Flow well to cleanup into temporary tanks then produce through test separator into temporary tanks to determine gas rate. Timings for flow periods will be advised by Dallas office.

Harkens Southwest Corp. CLAY HILL CANYON 32-D SAN JAUN CO., UT Sec.32-T41S-R25E SURVEY





## **Survey Report**

Page 1 Job No: 32-D Date: 2/12/95 Time: 9:44 pm Wellpath ID: SURVEY

Date Created: 2/6/95 Last Revision: 2/12/95

Calculated using the Minimum Curvature Method Computed using WIN-CADDS REV2.1.A Vertical Section Plane: 60.11 deg.

Survey Reference: WELLHEAD

Vertical Section Reference: WELLHEAD

Closure Reference: WELLHEAD TVD Reference: WELLHEAD

Harkens Southwest Corp. CLAY HILL CANYON 32-D SAN JAUN CO., UT Sec.32-T41S-R25E SURVEY

Measured	Incl	Drift	Course	TVD	Vertical Section	T O <sup>-</sup> Rectangular	TAL	Closure Dist. Dir.	DLS
Depth		Dir.	Length	(6)		•			(da/100ft)
(ft)	(deg.)	(deg.)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft) (deg.)	(dg/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00 N	0.00 E	0.00@ 0.00	0.00
First MWD									
466.00	1.60	32.80	466.00	465.94	5.78	5.47 N	3.52 E	6.51@ 32.80	0.34
676.00	1.50	4.00	210.00	675.87	9.92	10.68 N	5.30 E	11.92@ 26.42	0.37
986.00	2.80	332.60	310.00	985.65	12.51	21.45 N	2.10 E	21.55@ 5.60	0.55
1297.00	3.50	318.80	311.00	1296.18	10.98	35.33 N	7.65W	36.15@ 347.79	0.33
1608.00	2.80	319.40	311.00	1606.71	7.70	48.24 N	18.84W	51.79@338.67	0.23
1919.00	1.80	321.70	311.00	1917.46	5.58	57.84 N	26.81W	63.76@ 335.13	0.32
2230.00	0.80	278.70	311.00	2228.38	3.17	62.01 N	31.99W	69.77@332.71	0.43
2541.00	1.40	338.90	311.00	2539.33	2.05	65.88 N	35.50W	74.84@ 331.68	0.39
2821.00	1.50	357.60	280.00	2819.24	4.27	72.73 N	36.89W	81.55@ 333.11	0.17
3132.00	1.50			3130.14	9.69	80.30 N	34.97W	87.58@336.46	0.28
3443.00	1.10	87.20	311.00	3441.07	15.90	83.94 N	29.91W	89.11@340.39	0.41
3474.00	1.10	89.30	31.00	3472.07	16.43	83.96 N	29.31W	88.93@ 340.75	0.13
3513.00	1.10	93.50	39.00	3511.06	17.07	83.94 N	28.56W	88.66@341.21	0.21
BHA #1: 1.	25° mtr.	[in @ 3	532' MD]						
3576.00	1.60	95.60	63.00	3574.04	18.29	83.81 N	27.08W	88.08@342.09	0.80
3606.00	2.20	89.40	30.00	3604.02	19.13	83.78 N	26.09W	87.75@342.70	2.11
3639.00	2.90	89.40	33.00	3636.99	20.41	83.80 N	24.62W	87.34@ 343.62	2.12
3670.00	3.50	87.40	31.00	3667.94	21.93	83.85 N	22.89W	86.92@344.73	1.97
BHA #2: 1.	.25° mtr.	. [in @ 3	681' MD]						
3700.00	3.70	88.80	30.00	3697.88	23.60	83.91 N	21.01W	86.50@345.94	0.73
3731.00	3.90	89.80	31.00	3728.82	25.39	83.93 N	18.96W	86.05@347.27	0.68
3761.00	4.40	92.30	30.00	3758.74	27.25	83.89 N	16.79W	85.55@ 348.68	1.77
3792.00	4.80	91.60	31.00	3789.64	29.36	83.81 N	14.30W	85.02@350.32	1.30
3823.00	5.60	86.40	31.00	3820.51	31.83	83.87 N	11.50W	84.65@352.19	2.99
3854.00	6.30	85.50	31.00	3851.34	34.72	84.09 N	8.29W	84.50@ 354.37	2.28

## **Survey Report**

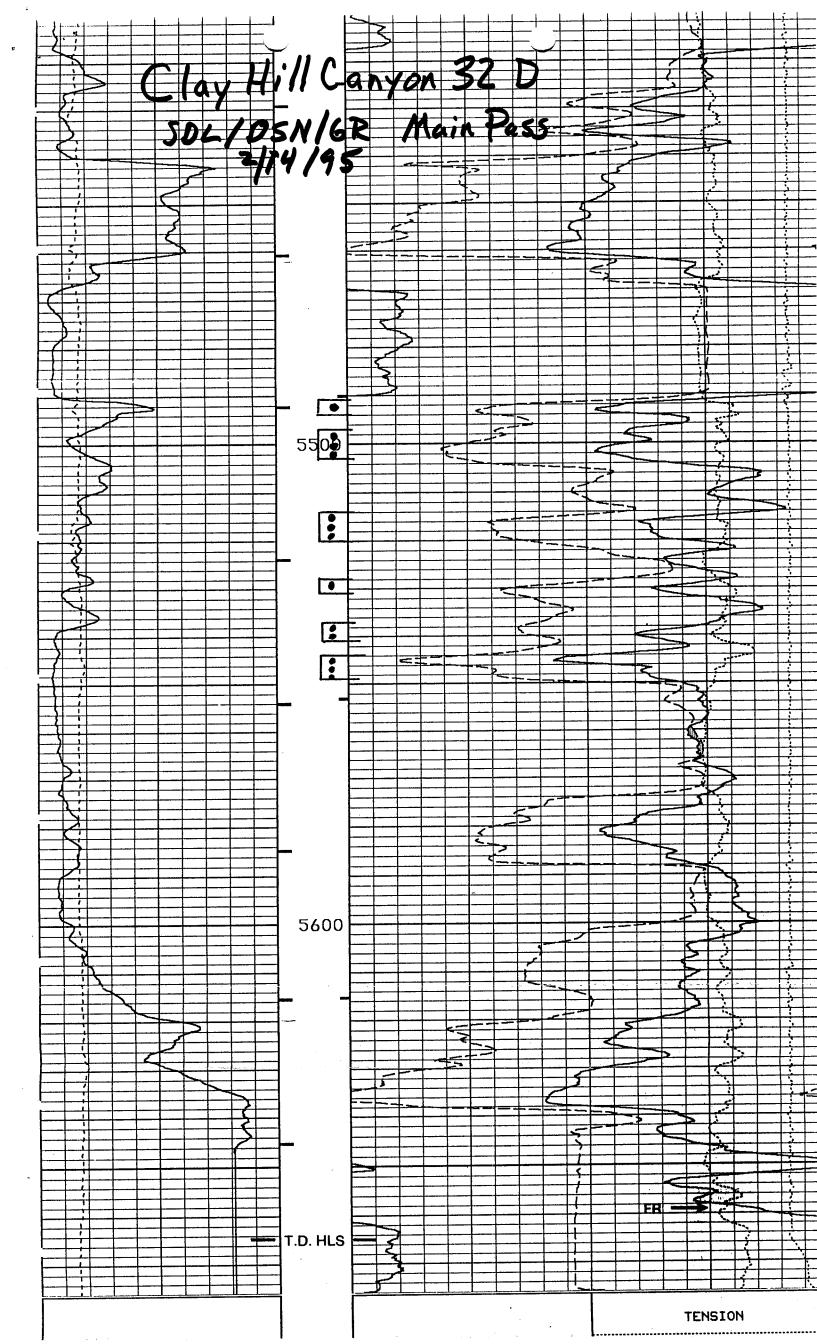
Page 2 Date: 2/12/95 Wellpath ID: SURVEY

Measured	Incl	Drift	Course	TVD	Vertical		TAL	Closure		DLS
Depth .		Dir.	Length		Section	Rectangula		Dist. I		
(ft)	(deg.)	(deg.)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft) (de	eg.)	(dg/100ft)
3886.00	7.10	81.80	32.00	3883.12	38.14	84.51 N	4.58W	84.64@3	56.90	2.84
3917.00	7.50	79.40	31.00	3913.87	41.83	85.16 N	0.70W	85.16@3	59.53	1.62
3948.00	8.00	78.20	31.00	3944.59	45.79	85.97 N	3.40 E	86.04@	2.27	1.70
3979.00	8.60	76.80	31.00	3975.26	50.06	86.94 N	7.77 E	87.29@	5.11	2.04
4011.00	9.00	76.70	32.00	4006.89	54.75	88.06 N	12.54 E	88.95@	8.10	1.25
4041.00	9.50	76.50	30.00	4036.50	59.38	89.18 N	17.23 E	90.83@	10.93	1.67
4072.00	9.90	78.50	31.00	4067.05	64.36	90.31 N	22.33 E		13.89	1.69
4103.00	10.50	77.60	31.00	4097.56	69.58	91.45 N	27.70 E	95.55@	16.85	2.00
4133.00	11.10	77.30	30.00	4127.03	74.95	92.67 N	33.18 E	98.43@	19.70	2.01
4165.00	11.60	77.00	32.00	4158.41	80.97	94.07 N	39.32 E	101.96@	22.69	1.57
4196.00	12.30	77.00	31.00	4188.73	87.11	95.52 N	45.58 E	105.83@	25.51	2.26
4227.00	12.70	75.80	31.00	4219.00	93.55	97.09 N	52.10 E	110.19@	28.22	1.54
4258.00	13.70	73.60	31.00	4249.18	100.40	98.97 N	58.92 E	115.18@	30.77	3.61
4290.00	14.50	71.30		4280.22	108.02	101.32 N	66.35 E	121.11@	33.22	3.05
4320.00	15.20	69.80		4309.21	115.58	103.88 N	73.60 E	127.31@		2.66
4351.00	16.00	69.00	31.00	4339.07	123.81	106.82 N	81.40 E	134.30@	37.31	2.67
4382.00	16.60	68.50		4368.83	132.41	109.97 N	89.51 E	141.80@		1.99
4414.00	17.10	67.70		4399.45	141.59	113.43 N	98.12 E	149.98@		1.72
4445.00	17.60	67.20	31.00	4429.04	150.76	116.98 N	106.66 E	158.30@	42.36	1.68
4476.00	18.30	66.10		4458.53	160.25	120.77 N	115.43 E	167.06@		2.51
4507.00	18.60	65.80		4487.94	170.01	124.76 N	124.38 E	176.18@		1.02
4539.00	18.90	65.60	32.00	4518.24	180.25	129.00 N	133.76 E	185.83@	46.04	0.96
4570.00	19.40	66.50		4547.53	190.37	133.12 N	143.05 E	195.41@		1.87
4601.00	19.70	67.10		4576.74	200.67	137.21 N	152.59 E	205.21@		1.16
4632.00	20.00	69.00	31.00	4605.90	211.09	141.14 N	162.35 E	215.13@	40 NN	2.30
4664.00	20.60	70.20		4635.91	222.04	145.01 N	172.76 E	225.55@		2.28
						143.01 N 148.67 N		235.57@		1.30
4694.00	20.90	69.50	30.00	4663.96	232.52	140.07 11	182.73 E	233.31@	30.07	1.50
4725.00				4692.88	243.54	152.66 N	193.16 E	246.20@		
4756.00	21.60	66.50	31.00	4721.74	254.78	156.99 N	203.63 E	257.12@	52.37	2.66
4787.00	21.10	64.70	31.00	4750.61	266.01	161.65 N	213.91 E	268.12@	52.92	2.66
4818.00	20.40	63.50		4779.60	276.97	166.45 N	223.79 E	278.90@		2.64
4849.00	19.70	63.10	31.00	4808.72	287.58	171.22 N	233.28 E	289.38@	53.72	2.30
4880.00	20.00	63.10	31.00	4837.88	298.09	175.99 N	242.67 E	299.77@	54.05	0.97
4911.00	20.30	63.30	31.00	4866.98	308.76	180.80 N	252.20 E	310.31@	54.36	0.99
4942.00				4896.01	319.62	185.62 N	261.96 E	321.06@	54.68	1.85
4973.00				4924.97	330.64	190.40 N	271.93 E	331.96@		0.94
5004.00	21.10	66.00	31.00	4953.90	341.73	195.04 N	282.05 E	342.92@	55.34	1.54
5035.00				4982.82	352.83	199.55 N	292.26 E	353.89@		
5066.00				5011.73	363.94	203.98 N	302.53 E	364.87@		0.67

**Survey Report** 

Page 3 Date: 2/12/95 Wellpath ID: SURVEY

Measured	Inci	Drift Dir.	Course Length	TVD	Vertical Section	T O Rectangula	TAL	Closure Dist. Dir.	DLS
Depth (ft)	(deg.)	(deg.)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft) (deg.)	(dg/100ft)
5097.00	22.00	65.10	31.00	5040.56	375.29	208.62 N	312.95 E	376.12@ 56.3°	3.35
5129.00	22.60	65.10	32.00	5070.16	387.39	213.74 N	323.97 E	388.12@ 56.59	1.88
5161.00	22.50	66.90	32.00	5099.72	399.59	218.73 N	335.18 E	400.23@ 56.87	7 2.18
5192.00	22.60	68.40	31.00	5128.35	411.38	223.25 N	346.17 E	411.91@ 57.18	3 1.88
5223.00	22.70	70.30	31.00	5156.96	423.16	227.46 N	357.34 E	423.59@ 57.52	2 2.38
5253.00	22.30	70.90	30.00	5184.67	434.45	231.27 N	368.17 E	434.78@ 57.86	3 1.54
5284.00	22.10	71.70	31.00	5213.38	445.94	235.03 N	379.26 E	446.18@ 58.2	1 1.17
5316.00	22.10	72.60		5243.02	457.71	238.72 N	390.72 E	457.88@ 58.58	3 1.06
5347.00	22.30	72.50		5271.73	469.15	242.23 N	401.90 E	469.25@ 58.9	2 0.66
5379.00	21.80	70.60	32.00	5301.39	480.92	246.03 N	413.29 E	480.98@ 59.2	4 2.72
5410.00	21.00	67.70		5330.25	492.09	250.05 N	423.86 E	492.12@ 59.4	4.28
Final surve	y:								
5445,00	21.00	69.10	35.00	5362.93	504.50	254.66 N	435.52 E	504.51@ 59.6	8 1.43
Proi'n to TI	D @ 2.0	° drop ra	ate as per C	RLG ENG.	rq				
5588.00	_	-		5497.68	551.31	269.63 N	480.91 E	551.34@ 60.7	2 2.43



## UNITED STATES DEPARTMENT OF THE INTERIOR DUBEAU OF LAND MANAGEMENT

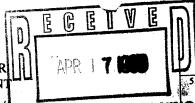
FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

1990)	BUREAU OF LAND		5. Lease Designation and Serial No.
	BUNEAU OF LANE	, MMM MODINE	14-20-603-373 (BIA)
S	UNDRY NOTICES AND	REPORTS ON WELLS	6. If Indian, Allottee or Tribe Name
Do not use this form	for proposals to drill or	to deepen or reentry to a different reservo	oir.
Use	"APPLICATION FOR PE	RMIT—" for such proposals	14444 10
		TOLOUTE	7. If Unit or CA, Agreement Designation
	SUBMIT IN	IRIPLICATE	n/A
1. Type of Well			
Oil Gas Well Well	Other		8. Well Name and No. Clay Hill Canyon 32D
2. Name of Operator	THE CONTENT TION CORPOR	27701	9. API Well No.
	EN SOUTHWEST CORPOR	RATION	43-037-31741
3. Address and Telephone No.	, Dallas, TX 75261	(214) 753-6900	. 10. Field and Pool, or Exploratory Area
	Sec., T., R., M., or Survey Descripti		Wildcat
			11. County or Parish, State
Sec 32-41S-25E	744' FNL & 378' F	JAP (WM\UM)	
CHECK A	PPROPRIATE BOX(s) TO	O INDICATE NATURE OF NOTICE, RE	PORT, OR OTHER DATA
		TYPE OF ACT	
TYPE OF SI	JBMISSION	TIPE OF ACT	ION
Notice of 1	ntent	Abandonment	Change of Plans
_		Recompletion	New Construction
Subsequent	Report	Plugging Back	Non-Routine Fracturing Water Shut-Off
_		Casing Repair	Conversion to Injection
Final Abar	ndonment Notice	Altering Casing	Dispose Water
		Other	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
miles) in le will lay on  Estimated lay compres  The line we construction	the surface and follow the surface and follow line an working pressure sor is not anticipated at till be 2-7/8" od line, 2.4	is not to exceed 125 max psi, based on e	equipment specifications.  ed connections.  d proposed completion
		EOR RECUMD OF	CC: St of Utah
14. I hereby certify that the	foregoing is true and correct		
	sutgomerus		Date 3/20/95
(This space for Federal			
	0	Title	R P BOLL W B D
Approved by	if any:	Title	E G EM W B
Title 18 11 C Cartina 100	I, makes it a crime for any nerson kno	wingly and willfully to make to any department or agency of	United these my also destitious of traudulent statemen
or representations as to any	matter within its jurisdiction.		

\*See Instruction on Reverse Side

DIV OF OIL, GAS & MINING

## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT



FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993
Lease Designation and Serial No.
4-20-603-373 (BIA)

4-20-603-373 (BIA)

no not use this form for proposals to drill	or to deepen or reentry to a different resent PERMIT—" for such proposals	VOIT. NAVAJO NATION  7. If Unit or CA, Agreement Designation
SUBMIT I	N TRIPLICATE	N/A
1. Type of Well    RX Oil	75261 (214) 753–6900 scription)	8. Well Name and No. Clay Hill Canyon 32D  9. API Well No. 43-037-31741  10. Field and Pool, or Exploratory Area Wildcat  11. County or Parish, State San Juan Co., UTAH
12. CHECK APPROPRIATE BOX(s	s) TO INDICATE NATURE OF NOTICE, F	EPORT, OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF AC	
Notice of Intent  Subsequent Report  Final Abandonment Notice	Abandonment  Recompletion  Plugging Back  Casing Repair  Altering Casing  Other	Change of Plans  New Construction  Non-Routine Fracturing  Water Shut-Off  Conversion to Injection  Dispose Water  (Note: Report results of multiple completion on W. Completion or Recompletion Report and Log form

An attempt to complete the subject well was performed during March. On 3/30/95 the well was SI for a 7 day pressure build-up. Currently the results of that data is being analysed.

Present Operations: SHUT-IN WAITING ON ORDERS

\* \* \* \* \* PLEASE CONSIDER THIS SUBMITTAL CONFIDENTIAL \* \* \* \* \*

CC: State of Utah

14. Chereby certify that the foregoing is true and correct
Signed County Matthe foregoing is true and correct
Title Production Administrator

Ontice Date

Conditions of approval, if any:

Date

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent stateme or representations as to any matter within its jurisdiction.

### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

APR 2 4 1995

FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993

Lease Designation and Serial No. -20-603-373 (BIA)

Indian, Allonee or Tribe Name

Change of Plans

**New Construction** 

Water Shut-Off

Non-Routine Fracturing

Conversion to Injection

SUNDRY NOTICES	AND REPORTS ON V
orm for proposals to dr	ill or to deepen or reen

TYPE OF SUBMISSION

Notice of Intent

Subsequent Report

Do not use this form for proposals to drill Use "APPLICATION FOR I	or to deepen or reen ry to a dillerent asseption of the person of the pe	Wining AVAJO NATION
	N TRIPLICATE	7. If Unit or CA, Agreement Designation N/A
1. Type of Well  Oil Gas Well Well Other	8. Well Name and No. Clay Hill Canyon 32D	
2. Name of Operator HARKEN SOUTHWEST COF	9. API Well No. 43-037-31741	
3. Address and Telephone No. P. O. Drawer 612007, Dallas, TX	75261 (214) 753–6900	10. Field and Pool, or Exploratory Area Wildcat
4. Location of Well (Footage, Sec., T., R., M., or Survey Desc Sec 32-41S-25E 744' FNL & 378'	11. County or Parish, State San Juan Co., UTAH	
OUTOW ADDDODDIATE BOY/o	) TO INDICATE NATURE OF NOTICE,	REPORT, OR OTHER DATA
CHECK APPROPRIATE BOX(S	TYPE OF	ACTION

Altering Casing Final Abandonment Notice Dispose Water Other (Note: Report results of multiple completion on Wel Completion or Recompletion Report and Log form. 13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drill

Abandonment

Recompletion

Plugging Back

Casing Repair

An attempt to complete the subject well was performed during March. On 3/30/95 the well was SI for a 7 day pressure build-up. Currently the results of that data is being analysed.

Present Operations: SHUT-IN WAITING ON ORDERS

give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

\* \* \* \* \* PLEASE CONSIDER THIS SUBMITTAL CONFIDENTIAL \* \* \* \* \*

State of Utah 4/10/95 foregoing is true and correct Production Administrator Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent state or representations as to any matter within its jurisdiction.

## UNITED STATES DEPARTMENT OF THE INTER OF BUREAU OF LAND MANAGEMENT

MAY 22 1995

[E] V [E]

FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993

Lease Designation and Serial No.

14-20-603-373 (BIA)
If Indian, Allottee or Tribe Name

## SUNDRY NOTICES AND REPORTS ON WELL

Do not use this form for proposals to drill or to deepen or leastly of offiffee with the Use "APPLICATION FOR PERMIT—" for such proposals.

Navajo Tribal

		7. If Unit or CA, Agreement Designation						
SUBMIT	SUBMIT IN TRIPLICATE							
1. Type of Well    Soil   Gas   Other	N/A  8. Weil Name and No.  Clay Hill Canyon 32D  9. API Weil No.  43-037-31741  10. Field and Pool, or Exploratory Area  Undesignated  11. County or Parish, State  San Juan County, Utah							
12. CHECK APPROPRIATE BOX(	s) TO INDICATE NATURE OF NOTICE, REPO	RT, OR OTHER DATA						
TYPE OF SUBMISSION	TYPE OF ACTION							
Notice of Intent	Abandonment Recompletion	Change of Plans  New Construction						
Subsequent Report  Final Abandonment Notice	Plugging Back Casing Repair Altering Casing X Other Status	Non-Routine Fracturing  Water Shut-Off Conversion to Injection Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)						
Describe Proposed or Completed Operations (Clearly state a give subsurface locations and measured and true vertically subsurface locations.)	ll pertinent details, and give pertinent dates, including estimated date of startir cal depths for all markers and zones pertinent to this work.)*	ng any proposed work. It went is directionally difficult						

Pursuant to to verbal notification by Rich Cottle, Harken Southwest (HSW) performed a sand frac on the subject well. HSW is currently swabbing the wellbore in an attempt to obtain an economically successful completion.

## PLEASE CONSIDER THIS INFORMATION CONFIDENTIAL

cc:

State of Utah

Navajo Nation - Minerals

Signed Outgomble Title Production Administrator Date 5/18/95

(This space for Federal or State office usa)

Approved by Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(June 1990)

		\ \ \ \ [	(32)	The state of the s
IIIN	I N 5	1995	Part Service and Service	FORM APPROVED Budget Bureau No. 1004-0135 Expires: March 31, 1993
JUN		1000	4	Lease pesignation and Serial No.

UNITED STATES Form 3160-5 DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT** SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to deepen or reentry to a different rese Navajo Nation Use "APPLICATION FOR PERMIT—" for such proposals 7. If Unit or CA, Agreement Designation SUBMIT IN TRIPLICATE N/A 1. Type of Well X Oil Well 8. Well Name and No. 2. Name of Operator Clay Hill Canyon 32D 9. API Well No. Harken Southwest Corporation 43-037-31741 3. Address and Telephone No. 10. Field and Pool, or Exploratory Area P. O. Box 612007, Dallas, TX 75261-2007 214/753-6900 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Undesignated 11. County or Parish, State NW/NW Sec 32-41S-25E 744' FNL & 378' FWL San Juan, UT CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 12. TYPE OF ACTION TYPE OF SUBMISSION Change of Plans Notice of Intent Abandonment Recompletion **New Construction** Subsequent Report Non-Routine Fracturing Plugging Back Casing Repair Water Shut-Off Altering Casing Conversion to Injection ☐ Final Abandonment Notice Other Status Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.) 13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled,

give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Swabbing of the subject wellbore produced minimal amounts of hydrocarbons. Subsequently a the swabbing unit was released on 5/30/95 and a production tree installed.

The well is SI pending engineering evaluation.

CC: State of Utah

Navajo Nation - Minerals Dept

BIA - Gallup, NM

CONFIDENTIAL

			<u></u>	 					
14. I hereby certif	y that the for	regoing is tru		omerwine_	Production	Administrat	or	Date	5/31/95
(This space for Approved by Conditions of			ise)	Jitle _	•			Date	

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Form 3160-4 (July 1992)

## UNITED STATES SUBMIT DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLECATE.

St Of Utah FORMAPPROVED OMB NO. 1004-0137 Expires: February 28, 1995

(See other instructions on reverse side)

Expires: February 28, 1995

5. LEASE DESIGNATION AND SERIAL NO. 14-20-603-373 (BIA)

WELL CON	APLETION	OR RE	COMP	LETIC	ONIRI	EPORT	<b>SM</b>		m	NAVAJO	NATI	ON
1a. TYPE OF WELL	: 011. WRI	.L 🗆 🐫	AS LELL.	DR	ATT CO	her			441 '	7. UNIT ACI	REEMENT	EMAN 7
L TYPE OF COMP						1111	9 0	1005	10	N/A		
	WORK DEE		ACK []	DIFF. RESVI		JUL,	<u>د د</u>	כצפו				se name, well no ANYON 32D
2. NAME OF OPERATO										9. API WEL		ANION 32D
	UTHWEST CO		ION		DIV.	OF OIL.	GA	S & MIN	HNG	43-037-		1
3. ADDRESS AND 7	612007 I		TY 7	5261		<u> </u>						L, OR WILDCAT
4. LOCATION OF WELL	(Report location	on cicariu a	nd in acco	rdance	with any	State requir	ement	*)*		UNDESI		
	4' FNL & 3			(WN						11. BEC., T.	, R., M.,	OR BLOCK AND BURYEY
			_ (===,		$\cap \cap M$	CIDEN				OR ARE		
At top prod. Inte	rvai reported be	10 W		(	//////	-// <i>IFN</i> /	TIM	1		Sec. 3	2-41S	-25E
At total depth	. 0501 1211	=	_			IULIY	ЦН	<u> </u>		12. COUNTY		13. STATE
4/4 FNL	& 859' FWI	J	- 1	14. PER 3174				1890 ED 4/94		PARISH		Utah
	16. DATE T.D. R	<del></del>	2.2.2.0	_	_					San Juan		ELEV. CASINGHEAD
02/01/95			N/A	5/2	lac	18.	52'	GR/46	65' K	B ETC.)		
20. TOTAL DEPTH, MD &			<i>-</i>	1/22.	IF MULT	IPI.E COMPL.,		23. INTE		ROTARY TO	OOLS	CABLE TOOLS
5665'MD/556	9'TVD 561	6'MD	,		NO NO	NT*		DRILI	ED BY	0-TD		
24. PRODUCING INTER	1		N-TOP, B	OTTOM,		D AND TVD)*					2	5. WAS DIRECTIONAL SURVEY MADE
	ng Enginee										- 1	Yes
DI TCHGI	.6	6										/
26. TYPE ELECTRIC A											27. 7	YAS WELL CORED Yes
Dipmeter/	ML/SD-DSN	/DL/LSS										
28.						ort all etringe E SIZE	set i			MENTING RECO	PD	AMOUNT PULLED
8-5/8" J-55	24.0	/FT. DE	426 t	(MD)		1/4"	310			t to sur		Ø
5-1/2" K-55	_		663!			7/8"				9  sx C1		<del> </del>
	15.5		0003			770				irc to p		
	-											
29.		LINER R	ECORD		<u></u>		·	30.		TUBING RE	CORD	
SIZE	TOP (MD)	воттом	(MD) S	ACKS CE	MENT*	SCREEN (M	D)	SIZE		DEPTH SET	(MD)	PACKER BET (MD)
								2-7/8	3"	5 <b>477'</b> 1	KB	
31. PERFORATION REC						32.	AC	ID, SHOT.				JEEZE, ETC.
4 JSPF, 90° 1 5544-49'; 55						DEPTH IN		L (MD)				NIE A
5514-20'; 549						5544-4				gal 15%		
		J 1, 1 J	•			5537-4			900	gal 15% gal 15%	HCL	NEA NFA
"DSCR						5528-3		Contir		on rever		11017
33.*					PROF	UCTION		COHLIN	ueu	OII LEVEL	. 50	· · · · · · · · · · · · · · · · · · ·
DATE FIRST PRODUCT	ION PROI	UCTION ME	THOD (Flo	wing, go	za lift, pr	ımping—size	and t	ype of pun	ıp)	عسر ا	ANT THE	UB (Producing or
N/A											SI	)
DATE OF TEST	HOURS TESTED	Снов	E BIZE	PROD'S	, FOR PERIOD	OILBBL.		GAS-MC	F.	WATER-1	ABL	GAS-OIL RATIO
					<del>&gt;</del>			ļ				
FLOW, TUBING PRESS.	CASING PRESS		ULATED OUR RATE	0111	BBI	GA8	-MCP.		WATER	RBL.	OIL	GRAVITT-API (CORR.)
	!		<del>&gt;</del>							TEST WIT		RT
34. DISPOSITION OF G	AB (Sold, used fo	or fuel, vent	ed, etc.)							TEST WILL		
35. LIST OF ATTACH	TE Vee											
Logs/Dix	edtional S	Survey/	Core A	nalys	sis							
36. I hereby certify	1 1					lete and cor	rect. a	s determin	ed from	all availabl	e record	le .
	7)1 -	1										
SIGNED	1 Hou	Gon	ery	TI'	TLE F	roducti	on .	Admini	strat	or DA	TE //	24/95
-	-			C	(c- A	ا ـ ـ ـ ـ نونام ام	Det	D	C:	4-7		
`	<b>-</b> (S	ee Instruc	nons and	3 Space	es ici A	Additional		OU VEA	:13E 31	14)		

Creek Core #1 5549'  Core #2 5609'  5549' 5609'  100 gal Bragel G3290 15% HCL NEA 494'  15,000 gal Boragel G3290 11b/gal 20/40 Bragel G3290 11b/gal 20/40 Br		NAME		
Creek Core #1 5549'  Core #2 5609'  5549'  5549'  Figure 182 5609'  15549'  Core #2 5609'  5549'  5509'  15500 all 152 HCL NEA 494'  1500 gal Boragel G3290 11b/gal 20/40 Broom 15,000 gal Boragel G3290 11b/gal 20/40 Broom 12,000 gal Boragel G3290			MEAS, DEPTH	TRUE VERT. DEPTH
Creek Core #1 5549'  Core #2 5609'  5549'  5549'  15549'  15549'  15549'  15549'  1000 gal Boragel G3290  1152 HCL NEA 750 gal 152 HCL NEA 750 gal 152 HCL NEA 15200 gal Boragel G3290  115,000 gal Boragel G3290			4	
Core #2 5549' 56  Continued  4-20' 750 gal 1 1 750 gal 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Core Analysis Attached	Hermosa	4381'	43691
5549'   56		Upper Ismay	5271'	5201
Continued  4-20' 7-5503' 1-5494' A50 gal 15,000 gal 30# Linear Gel 2000 gal Boragel G3290 SLF 15,000 gal Boragel G3290 SLF 12,000 gal Boragel G3290 SLF 12,000 gal Boragel G3290 SLF 12,000 gal Boragel G3290		Hovenweep Sh	53931	5314'
Continued 4-20' 7-5503' 1-5494' A 50 gal 1 1 1-5494' 1 2,000 gal 30# Linear Gel 15,000 gal Boragel G3290 SLF 12,000 gal Boragel G3290		Lower Ismay	53991	5320'
Continued 4-20' 7-5503' 7-5503' 7-5494' 1-5494' 1-5494' 1-5494' 1-5496' 1-5000 gal 30# Linear Gel 2000 gal Boragel G3290 SLF 1-5,000 gal Boragel G3290		Gothic Shale	54401	53581
Continued  4-20' 7-5503' 1-5494' A50 gal 15,000 gal 30# Linear Gel 2000 gal Boragel G3290 SLF 12,000 gal Boragel G3290 SLF 12,000 gal Boragel G3290 SLF 12,000 gal Boragel G3290		Desert Creek	5461	5378'
Continued 4-20' 7-5503' 7-5503' 7-5494' 7-5494' 7-500 gal 7-500 ga		Chimney Rock Shale	5628	55331
Continued  4-20' 7-5503' 7-5503' 1-5494' A50 gal 1 Indirac well; Boragel & Brady Sand as follows  Pad 15,000 gal Boragel G3290 SLF 12,000 gal Boragel G3290		Akah (?)	56381	5542
900 ga1   1   750 ga1   1   1   1   1   1   1   1   1   1				
Sand frac well; Boragel & Brady Sand as follows @ ± 21.5 BPM     1-Pad			·	
15,000 gal 30# Linear Gel 2000 gal Boragel G3290 15,000 gal Boragel G3290 12,000 gal Boragel G3290	PM:			
5-SLF 5000 gal Boragel G3290 710 gal 20/40 Brady Sand (12,500 lb) 6-SLF 2500 gal Boragel G3290 51b/gal 20/40 Brady Sand (12,500 lb) 7-Flush 2120 gal 30# Linear Gel Trickled 1 sx of sand in pad to clean perfs. Avg treating pressure of 5600 psi (tbg)	11b/gal 20/40 Brady Sand (2000 lb)         21b/gal 20/40 Brady Sand (30,000 lb)         31b/gal 20/40 Brady Sand (36,000 lb)         41b/gal 20/40 Brady Sand (20,000 lb)         51b/gal 20/40 Brady Sand (12,500 lb)         51b/gal 20/40 Brady Sand (12,500 lb)         vg treating pressure of 5600 psi (tbg)		:	

## **Survey Report**

Page 1 Job No: 32-D Date: 2/12/95

Time: 10:48 pm Wellpath ID: SURVEY Date Created: 2/6/95 Last Revision: 2/12/95

Calculated using the Minimum Curvature Method Computed using WIN-CADDS REV2.1.A Vertical Section Plane: 60.11 deg.

Survey Reference: WELLHEAD

Vertical Section Reference: WELLHEAD

Closure Reference: WELLHEAD TVD Reference: WELLHEAD

Harkens Southwest Corp. CLAY HILL CANYON 32-D SAN JAUN CO., UT Sec.32-T41S-R25E SURVEY JUL 26 1995
DIV. OF OIK, GAS & MINING

Measured	Incl	Drift	Course	TVD	Vertical	TO		Closure	DLS
Depth (ft)	(deg.)	Dir. (deg.)	Length (ft)	(ft)	Section (ft)	Rectangular (ft)	f Offsets (ft)	Dist. Dir. (ft) (deg.)	(dg/100ft)
` ,	, -,	, , ,			. ,	, ,		• • • • • • • • • • • • • • • • • • • •	0.00
0.00 First MWD	0.00	0.00 low csnd	0.00	0.00	0.00	0.00 N	0.00 E	0.00@ 0.00	0.00
466.00	1.60	32.80	466.00	465.94	5.78	5.47 N	3.52 E	6.51@ 32.80	0.34
676.00	1.50	4.00	210.00	675.87	9.92	10.68 N	5.30 E	11.92@ 26.42	0.37
986.00	2.80	332.60	310.00	985.65	12.51	21.45 N	2.10 E	21.55@ 5.60	0.55
1297.00		318.80	311.00	1296.18	10.98	35.33 N	7.65W	36.15@ 347.79	0.33
1608.00		319.40	311.00	1606.71	7.70	48.24 N	18.84W	51.79@338.67	0.23
1919.00	1.80	321.70	311.00	1917.46	5.58	57.84 N	26.81W	63.76@335.13	0.32
2230.00		278.70	311.00	2228.38	3.17	62.01 N	31.99W	69.77@332.71	0.43
2541.00	1.40	338.90	311.00	2539.33	2.05	65.88 N	35.50W	74.84@331.68	0.39
2821.00	1.50	357.60	280.00	2819.24	4.27	72.73 N	36.89W	81.55@ 333.11	0.17
3132.00	1.50	30.80	311.00	3130.14	9.69	80.30 N	34.97W	87.58@336.46	0.28
3443.00	1.10	87.20	311.00	3441.07	15.90	83.94 N	29.91W	89.11@340.39	0.41
3474.00	1.10	89.30	31.00	3472.07	16.43	83.96 N	29.31W	88.93@340.75	0.13
3513.00	1.10			3511.06	17.07	83.94 N	28.56W	88.66@341.21	0.21
BHA #1: 1.				*. <del>.</del>					
3576.00	1.60	95.60	63.00	3574.04	18.29	83.81 N	27.08W	88.08@342.09	0.80
3606.00	2.20			3604.02	19.13	83.78 N	26.09W	87.75@342.70	2.11
3639.00	2.90			3636.99	20.41	83.80 N	24.62W	87.34@ 343.62	2.12
3670.00	3.50	87.40	31.00	3667.94	21.93	83.85 N	22.89W	86.92@344.73	1.97
BHA #2: 1.									
3700.00	3.70			3697.88	23.60	83.91 N	21.01W	86.50@ 345.94	0.73
3731.00		89.80		3728.82	25.39	83.93 N	18.96W	86.05@ 347.27	0.68
3761.00	4.40	92.30	30.00	3758.74	27.25	83.89 N	16.79W	85.55@ 348.68	1.77
3792.00	4.80			3789.64	29.36	83.81 N	14.30W	85.02@350.32	
3823.00	5.60			3820.51	31.83	83.87 N	11.50W	84.65@ 352.19	
3854.00	6.30	85.50	31.00	3851.34	34.72	84.09 N	8.29W	84.50@354.37	2.28

Halliburton Drilling Systems

Page 2

Page 2 Survey Report

JUL 26 1995

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Measured	Incl	Drift	Course	TVD	Vertical	TO	TAL	closure		DLS
	11161	Dir.	Length	140	Section	Rectangula		Dist. [	Dir.	
Depth	(doa )			<b>/#</b> \	(ft)	(ft)	(ft)	(ft) (de		(dg/100ft)
(ft)	(deg.)	(deg.)	(ft)	(ft)	(11)	(11)	(11)	(11) (40	9.)	(49, 700.1)
2006.00	7.10	81.80	32.00	3883.12	38.14	84.51 N	4.58W	84.64@35	56.90	2.84
3886.00	7.10	79.40	31.00	3913.87	41.83	85.16 N	0.70W	85.16@3		1.62
3917.00		78.20	31.00	3944.59	45.79	85.97 N	3.40 E	86.04@		1.70
3948.00	8.00	70.20	31.00	3944.39	43.19	05.57 14	3.40 L	00.01@		
2070.00	8.60	76.80	31.00	3975.26	50.06	86.94 N	7.77 E	87.29@	5.11	2.04
3979.00		76.70	32.00	4006.89	54.75	88.06 N	12.54 E		8.10	1.25
4011.00	9.00			4006.69	59.38	89.18 N	17.23 E	90.83@		1.67
4041.00	9.50	76.50	30.00	4030.30	39.30	09.1014	17.23 L	30.00@	.0.00	
4072.00	9.90	78.50	31.00	4067.05	64.36	90.31 N	22.33 E	93.03@	13.89	1.69
	10.50	77.60	31.00	4007.03	69.58	91.45 N	27.70 E	95.55@		2.00
4103.00					74.95	92.67 N	33.18 E	98.43@		2.01
4133.00	11.10	77.30	30.00	4127.03	74.93	92.07 IN	33.10 L	30.73@	10.70	2.01
4465.00	11.60	77.00	32.00	4158.41	80.97	94.07 N	39.32 E	101.96@	22 69	1.57
4165.00	11.60	77.00		4188.73	87.11	95.52 N	45.58 E	105.83@		2.26
4196.00	12.30	77.00					52.10 E	110.19@		
4227.00	12.70	75.80	31.00	4219.00	93.55	97.09 N	52.10 E	110.13@	20.22	1.54
4050.00	40.70	70.00	24.00	4040 40	100.40	98.97 N	58.92 E	115.18@	3N 77	3.61
4258.00	13.70	73.60		4249.18	100.40	101.32 N	66.35 E	121.11@		
4290.00	14.50	71.30		4280.22			73.60 E	127.31@		
4320.00	15.20	69.80	30.00	4309.21	115.58	103.88 N	73.00 E	121.3100	33.32	2.00
4054.00	40.00	60.00	24.00	4339.07	123.81	106.82 N	81.40 E	134.30@	<b>37 31</b>	2.67
4351.00	16.00	69.00					89.51 E	141.80@		
4382.00	16.60	68.50		4368.83	132.41	109.97 N		149.98@		
4414.00	17.10	67.70	32.00	4399.45	141.59	113.43 N	98.12 E	149.300	40.00	1.72
4445.00	17.60	67.20	31.00	4429.04	150.76	116.98 N	106.66 E	158.30@	42 36	1.68
4476.00				4458.53	160.25	120.77 N	115.43 E	167.06@		
4507.00		65.80		4487.94	170.01	124.76 N	124.38 E	176.18@		
4507.00	10.00	05.00	31.00	4407.34	170.01	124.7014	124.00 L	170.10@		
4539.00	18.90	65.60	32.00	4518.24	180.25	129.00 N	133.76 E	185.83@	46.04	0.96
4570.00		66.50		4547.53		133.12 N	143.05 E	195.41@		
4601.00				4576.74		137.21 N	152.59 E	205.21@		
4601.00	19.70	07.10	31.00	4570.74	200.07	137.211	132.33 L	200.2100	40.04	0
4632.00	20.00	69.00	31.00	4605.90	211.09	141.14 N	162.35 E	215.13@	49 00	2.30
4664.00				4635.91	222.04	145.01 N	172.76 E	225.55@		
				4663.96	232.52	143.67 N	182.73 E	235.57@		
4694.00	20.90	69.50	30.00	4003.90	232.32	140.07 19	102.73 L	233.31@	30.07	1.00
4705.00	24.20	60 60	24.00	4692.88	243.54	152.66 N	193.16 E	246.20@	51 68	1.66
4725.00				4721.74		152.00 N 156.99 N	203.63 E	257.12@		
4756.00						161.65 N	213.91 E	268.12@		
4787.00	21.10	64.70	31.00	4750.61	266.01	101.0514	213.91 L	200.12@	JZ.JZ	. 2.00
4818.00	20.40	63.50	31.00	4779.60	276.97	166.45 N	223.79 E	278.90@	53 36	2.64
				4808.72		171.22 N	233.28 E	289.38@		
4849.00						171.22 N 175.99 N	242.67 E	299.77@		
4880.00	20.00	63.10	31.00	4837.88	298.09	173.5514	242.U/ C	233.110	J <del>-7</del> .UJ	. 5.01
4911.00	20.30	63.30	31.00	4866.98	308.76	180.80 N	252.20 E	310.31@	54 36	0.99
4942.00				4896.01		185.62 N	261.96 E	321.06@		
4973.00				4924.97		190.40 N	271.93 E	331.96@		
	£1.00	04.70	, 31.00	4324.31	330.04	130.4014	211.33 L	001.00@	55.00	3.3
5004.00	21.10	66.00	31.00	4953.90	341.73	195.04 N	282.05 E	342.92@	55 34	1.54
5035.00				4933.90		199.55 N	292.26 E	353.89@		'
						203.98 N	302.53 E	364.87@		
5066.00	21.20	66.90	31.00	5011.73	363.94	203.90 N	3UZ.33 E	304.01W	JU.U I	0.07

**Survey Report** 

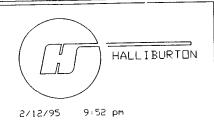
Page 3 Date: 2/12/95 Wellpath ID: SURVEY

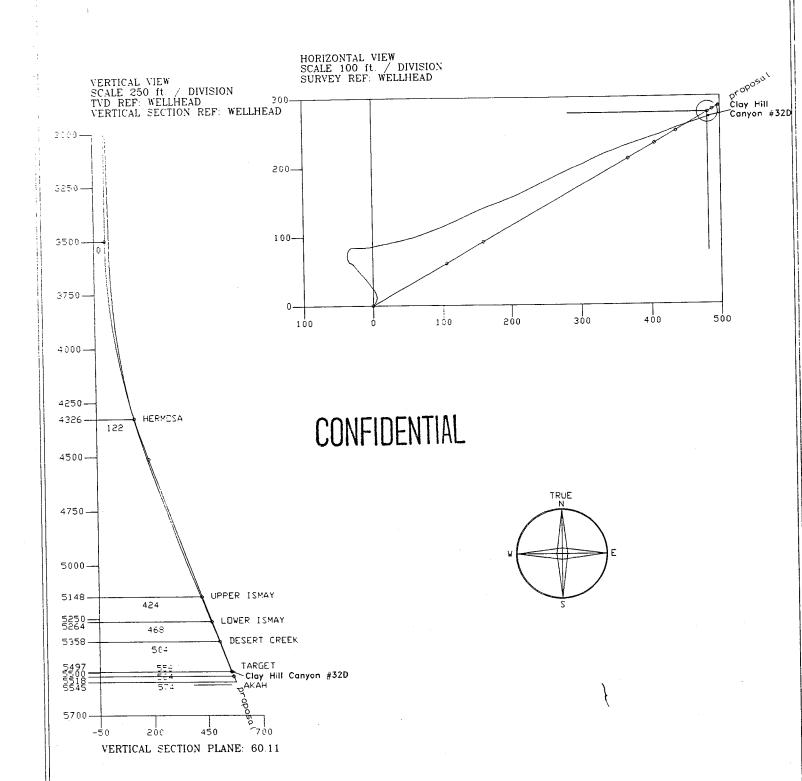
Measured	Incl	Drift Dir.	Course Length	TVD	Vertical Section	T O Rectangula	T A L r Offsets	Closure Dist. Dir.	DLS
Depth (ft)	(deg.)	(deg.)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft) (deg.)	(dg/100ft)
5097.00	22.00	65.10	31.00	5040.56	375.29	208.62 N	312.95 E	376.12@ 56.3	
5129.00	22.60	65.10	32.00	5070.16	387.39	213.74 N	323.97 E	388.12@ 56.5 <sup>s</sup>	
5161.00	22.50	66.90	32.00	5099.72	399.59	218.73 N	335.18 E	400.23@ 56.8	7 2.18
5192.00	22.60	68.40	31.00	5128.35	411.38	223.25 N	346.17 E	411.91@ 57.1	
5223.00	22.70	70.30	31.00	5156.96	423.16	227.46 N	357.34 E	423.59@ 57.5	2 2.38
5253.00	22.30	70.90	30.00	5184.67	434.45	231.27 N	368.17 E	434.78@ 57.8	6 1.54
5284.00	22.10	71.70	31.00	5213.38	445.94	235.03 N	379.26 E	446.18@ 58.2	1 1.17
5316.00	22.10	72.60	32.00	5243.02	457.71	238.72 N	390.72 E	457.88@ 58.5	8 1.06
5347.00	22.30	72.50	31.00	5271.73	469.15	242.23 N	401.90 E	469.25@ 58.9	2 0.66
5379.00	21.80	70.60	32.00	5301.39	480.92	246.03 N	413.29 E	480.98@ 59.2	4 2.72
5410.00	21.00	67.70		5330.25	492.09	250.05 N	423.86 E	492.12@ 59.4	6 4.28
Final surve		07.70	01.00	0000.20				O	
5445.00		69.10	35.00	5362.93	504.50	254.66 N	435.52 E	504.51@ 59.6	8 1.43
Projection	to TD @	presen	t trends:						
5588.00	_	74.80		5496.44	554.60	270.53 N	484.19 E	554.64@ 60.8	1 1.43

## CONFIDENTIAL



Harkens Southwest Corp. CLAY HILL CANYON 32-D. SAN JAUN CO., UT Sec.32-T41S-R25E SURVEY





### HARKEN SOUTH WEST CORP. CLAY HILL CANYON 32-D NWSÉ SECTION 32, T41S - R25E SAN JUAN COUNTY, UTAH

#### CORE #1 DESERT CREEK 5489'-5549' CUT-60' IN 5 1/2 HRS. RECOVERED-60'



5489.0	DOL	gy, crpxl dns mtx, abnt ANHY incl-POR fl, n-v rr intxl v rr pp vug POR, NFSOC
5491.0	DOL	gy, crpxl dns, rr micsuc-vfxl, v sl arg, tt-rr intxl-tr pp vug POR, fr spty bri yel FLOR, rr ltbrn STN, fr mod fast stmg mlky CUT, g OD
5493.0	DOL	gy, crpxl, dns, sl arg, tt-v rr pp vug POR, tr orng mnrl FLOR, NSOC
5494.0	DOL	gybrn, micxl, sl micsuc, slty ip, arg ip, tr intxl-v rr pp vug POR, FLOR AA, NSOC
5496.0	DOL	AA, tr ANHY incl-nod, orng mnrl FLOR, NSOC
5498.0	DOL	AA, FLOR AA, NSOC, poss salt xl in mtx
5500.4	DOL	brn, micxl-micsuc, sl arg, ANHY xl-rr nod, rr pos salt xl, fr intxl-v rr pp vug POR, n-fnt dull orng mnrl FLOR, NSOC
5502.0	DOL	m-dkgybrn-gy, crpxl, occ micxl-micsuc, rthy-slty, rr-tr ANHY nod-xl, tt-v rr intxl-pp vug POR, nfosc
5503.7	DOL	ltbrn, crpxl, occ micxl, sl slty, ANHY xl-incl, tt-v rr intxl-pp vug POR, NFSOC
5505.7	DOL	tan, crpxl, occ micxl-vfxl, micsuc ip, sl arg, abnt ANHY fl POR, n-v rr intxl-v rr pp vug POR, NFSOC
5509.0	DOL	AA, incr crpxl, rr ANHY xl, v rr intxl-tr pp vug POR, n-v rr v spty bri yel FLOR, v rr ltbrn STN. n-v rr fr mod fast stmg mlky CUT
5511.5	DOL	ltbrn, micxl-micxu, suc-vfxl ip. g bri yel FLOR, tr-fr ltbrn STN, tr g mod fast-fast stmg mlky CUT
5513.5	DOL	tan-ty, crpxl, rr micxl-micsuc. rthy-sl slty, rr ANHY fl POR-xl, n-v fnt dull orng-dull yel FLOR, NSOC
5515.3	DOL	ltbrn-gybrn, crpxl, occ micxl, rthy-sl slty, v sl alg, tr ANHY xl-POR fl, tt, NFSOC
5517.0	DOL	tan, crpxl, micxl ip, anhy-ANHY xl-rr inxl, tt-v rr pp vug, NFSOC
5518.4	DOL	tan, crpxl-micxl, rthy-sl slty, abnt ANHY xl-incl, tr pp vug-rr intxl POR, NFSOC
5520.5	DOL	tan, crpxl, v rr micxl-micsuc. ANHY incl-xl, sl slty, tt-v rr intxl-v rr v spty pp vug POR, NFSOC
5522.0	DOL	gy, crpxl, sl arg, tt-v rr pp vug POR, NFSOC

5523.7	DOL	gy, crpxl dns mtx, sl alg, abnt mic fox, rr ANHY xl, tr pp vug-tr-fr intxl POR, fr-g bri yel FLOR, g dkbrn-blk STN, tr-fr mod fast-fast stmg mlky CUT, fr OD
5525.5	DOL	gy, crpxl, dns, rr brac fos, rr ANHY xl, tt-v rr pp vug POR, n-v rr v spty bri yel FLOR, n vis STN, n-v p slow dif-ring CUT
5527.6	DOL	gy, crpxl, dns, v rr ANHY fl frac, tt, NFSOC
5530.0	DOL	AA, micxl ip, n vis-rr pos frac POR, fr-g bri yel FLOR, n vis STN, n-v rr slow dif CUT
5533.7	DOL	gy-ltbrn, crpxl dns mtx, alg, v sl slty, occ v sl arg, rr ANHY xl, occ carb mud incl, tt-tr intxl-v rr pp vug POR, tr-fr dull-bri yel FLOR, rr ltbrn-blk STN, rr-tr slow-mod fast stmg mlky CUT, tr SALT xl on core
5536.5	DOL	AA, tr-fr intxl-tr pp vug-alg POR, fr-g bri yel FLOR, tr-fr ltbrn-occ blk STN, fr-g mod fast-fast stmg lky CUT, fr OD, tr SALT xl precipitating out on core
5538.7	DOL	AA, tr-fr mic fos, fr intxl-vug POR, g bri yel FLOR, STN-CUT AA, SALT xl AA
5540.9	DOL	tan, crpxl dns mtx, alg ip, tr ANHY xl-incl-POR fl, tr mic fos, tt-tr pp vug POR, tr spty bri yel FLOR, n-v rr brn STN, tr fr slow-mod fast stmg mlky CUT, n-v fnt OD
5543.9	DOL	gy, crpxl, occ micxl, rthy, occ sl slty, arg ip, ANHY xl-incl, tt-v rr intxl-pp vug POR, NFSOC
5545.0	LS	tan, crpxl, dns, tr blk carb SH incl, tr ANHY incl, Crin fos, tt, NFSOC
5546.0	LS	AA, abnt Crin-Brac fos, abnt ANHY incl, tt, v rr spty dull yel FLOR, NSOC
5548.0	LS	gy-tan, crpxl, dns, abnt ANHY incl, v rr carb SH incl, abnt Brac-Crin fos, tt, NFSOC

## CONFIDENTIAL

#### HARKEN SOUTH WEST CORP. CLAY HILL CANYON 32-D NWSE SECTION 32, T41S - R25E SAN JUAN COUNTY, UTAH

CORE #2 DESERT CREEK 5549'-5509' CUT-60' IN 6 1/2 HRS. RECOVERED-60'



5549.0	LS	gy, crpxl dns mtx, rr micxl-micsuc, alg, abnt ANHY fl POR, tt-v rr intxl-pp vug POR, rr spty dull yel FLOR, v rr ltbrn STN, v p slow dif CUT
5550.5	LS	AA, rr Brac fos, tt-v rr intxl-pp vug POR, FLOR-STN-CUT AA
5552.7	LS	AA, rr fos, POR-FLOR (strky)-STN-CUT AA
5555.5	LS	AA, POR (pred ANHY plugged)-STN AA, v p resid ring CUT
5558.5	LS	AA, tt-n vis POR, v rr v fnt dull orng mnrl-dull yel FLOR, v rr v p ltbrn STN, n-v p resid ring CUT
5561.4	LS	gy, crpxl dns mtx, alg, abnt ANHY fl alg POR, styol, tt, v rr dull mnrl FLOR, NSOC
5564.5	LS	AA
5567.8	CONTA	ACT LS AA & DOL-tan, crpxl-micxl, occ micsuc, ANHY nods, v sl slty, tr intxl POR, dull orng mnrl FLOR, NSOC
5570.0	DOL	mbrn, crpxl, occ micxl, dns, styol, rr ANHY nod, tt-v rr dull yel FLOR at styol contact, n-v rr brn STN, n-v p slow stmg-dif mlky CUT
5571.3	DOL	mbrn, crpxl-micxl, rthy, sity, tt, NFSOC
5574.0	DOL	brn-mb rn, micxl-micsuc, slty. sl arg, rr ANHY nod-xl, tt-tr intxl POR, fr-g bri yel FLOR, fr slow-mod fast stmg mlky CUT, fr OD
5576.5	DOL	tan, micxl-crpxl, rthy, sl slty, rr ANHY xl, tt-v rr intxl POR, NFSOC
5579.5	DOL	ltgybrn, AA, occ micsuc, tr ANHY nod, tt-v rr intxl POR, NFSOC
5582.0	CONTA	ACT DOL-AA & LS-gy, crpxl dns mtx, sl alg, abnt ANHY incl-POR fl, n-v rr mnrl FLOR, NSOC
5584.3	LS	AA, styol, ANHY fl alg POR, NFSOC
5587.2	LS	AA
5589.0	LS	AA
5593.9	LS	gy-tan, crpxl, styol, tr ANHY incl-nod, tt, v rr orng mnrl FLOR, NSOC
5596.0	DOL	m-dkbrn, crpxl-micxl, occ micsuc, rthy, slty, tr ANHY nod, tt-rr intxl POR, NFSOC, poss wet

5596.9 DOL	m-dkbrn, micxl-vfxl, micsuc ip, styol, tr ANHY xl, tt-tr intxl-v rr pp vug POR, fr spty bri yel FLOR, fr brn STN, fr-g mod fast-fast stmg mlky CUT, fr OD tr SALT on core
5598.0 DOL	tan, crpxl-micxl, rthy, sl slty, rr ANHY nod, tt, NFSOC
5601.0 DOL	ltgybrn-brn, AA, micsuc ip, rr intxl POR, n-v rr spty dull yel FLOR, n vis STN, p resid ring CUT
3604.5 DOL	gybrn, AA, POR-FLOR-STN AA, v rr slow-mod fast stymg mlky CUT
5607.0 DOL	gy, crpxl, rthy-sl slty, shy-v shy, rr fos frag, tt, NFSOC
5608.8 DOL	m-dkgybrn, AA, v shy, grdg to dol SH, tt, NFSOC
	CONFIDENTIAL
	~



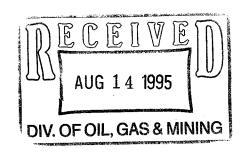
## HARKEN SOUTHWEST CORPORATION

(formerly Chuska Energy Company)

### **DATA TRANSMITTAL**

August 11, 1995

Ms. Vicki Dyson State of Utah Department of Natural Resources 355 West North Temple 3 Triad Center, Suite 350 Salt Lake City, Utah 84180-1203



Dear Ms. Dyson:

Please find enclosed a copy of the following log:

415 25 8 32

Harken Southwest Corporation Clay Hill Canyon #32D San Juan County, Utah 43-637 - 31741 Acoustic Cement Bond Log

Please sign one copy of this transmittal and return one to me. Thank you.

Rachelle Montgomery Production Administrator

Received by: \_\_\_\_\_ Date: \_\_\_\_

#### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FFR | 6 1996

FORM APPROVED Budget Bureau No. 1004-0135

Expires: March 31, 1993 5. Lease Designation and Serial No.

14-20-603-373 (BIA) 6. If Indian, Allottee or Tribe Name

### SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals

Navajo Nation

SUBMIT		
1. Type of Well Oil Gas Well Well Other Drilling 2. Name of Operator	N/A 8. Well Name and No. Clay Hill Canyon 32-D	
Harken Southwest Corporation  3. Address and Telephone No.  P.O. Box 612007 Dallas, Tex  4. Location of Well (Footage, Sec., T., R., M., or Survey Dallas)	9. API Well No. 43-037-31741 10. Field and Pool, or Exploratory Area Undesignated 11. County or Parish, State	
744' FNL & 378' FWL (NW/NW) Sec. 32-41S-25E  12. CHECK APPROPRIATE BOX(		
TYPE OF SUBMISSION.  Notice of Intent  Subsequent Report	TYPE OF ACTIO	Change of Plans  New Construction  Non-Routine Fracturing
Final Abandonment Notice	Casing Repair Altering Casing OtherStatus (Shut-In)  Il pertinent details, and give pertinent dates, including estimated date of sta	Water Shut-Off Conversion to Injection Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

Harken Southwest is currently evaluating the subject wellbore for directional/horizontal opportunity. HSW is currently seeking an industry partner to optimize the potential of a commercially economic completion.

The size of the drilling pit has been minimized, for re-entry purpose, and is currently fenced. Therefore, HSW respectfully requests approval to continue a shut-in status.

State of Utah cc: Navaio Nation BIA - Gallup, NM

Accepted by the Utah Division of oil, Gas and Mining

FOR RECORD ONLY

			101.
(h)			
14. Thereby contify that the foregoing is true a	and correct  Title	Production Administrator	Date 02/13/96
(This space for Federal or State office use	/ 1		Date
Approved by Conditions of approval, if any:	Title _		

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT iget Bureau No. 1004-0135

Expires: March 31, 1993

5. Lease Designation and Serial No.

14-20-603-373 (BIA) SUNDRY NOTICES AND REPORTS ON WELLS 6. If Indian, Allottee or Tribe Name Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT-" for such proposals Navajo Nation 7. If Unit or CA, Agreement Designation SUBMIT IN TRIPLICATE 1. Type of Well 8. Well Name and No. **V** Other Clay Hill Canyon 32D 2. Name of Operator 9. API Well No. Harken Southwest Corporation 43-037-31741 3. Address and Telephone No. 10. Field and Pool, or Exploratory Area 75261 Dallas, Texas P.O. Box 612007 Undesignated 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 11. County or Parish, State 744' FNL & 378' FWL (NW/NW) Surface: Sec. 32-41S-25E San Juan, Utah CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF ACTION TYPE OF SUBMISSION Change of Plans Abandonment Notice of Intent New Construction Recompletion Non-Routine Fracturing Plugging Back Subsequent Report Casing Repair Conversion to Injection Altering Casing Final Abandonment Notice Dispose Water (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.) 13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled,

give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

The subject well was drilled, casing set and completion attempted prior to maintaining the current status of SI. Subsequent evaluation indicates the main geologic feature has not been penetrated. Harken's staff continues to evaluate all options of lease acquisition, communitization agreement, etc.and various other proposals.

Since the wellbore currently has 8-5/8" csg set @ 426' and 5-1/2" csg set @ 5663' which was purchased new in February of 1995 and cement was circulated to surface, virtually no risk is involved with the current wellbore status. Therefore, Harken request approval to continue the current well status for an additional 12 month period.

\*\*\*\* PLEASE CONSIDER THIS SUBMITTAL CONFIDENTIAL

DIV. OF OIL, GAS & MINING

CC: State of Utah Navajo Nation BIA - Gallup, NM pregoing is true and correct 14. I hereby contify

Production Administrator

aomeri

Accepted by the Utah Division of Date

Oil. Gas and Mining

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department of a read of the limit states and all fictitious or fraudulent states or representations as to any matter within its jurisdiction

(J

orm 3160-5 June 1990)	=	T OF THE INTERIOR		The state of the s	Budget Bureau No. 1004-0135 Expires: March 31, 1993	
	BUREAU OF	LAND MANAGEMENT	DIV. OF OIL, GA	AS & M	No. Designation and Serial No.	
	SUNDRY NOTICES	AND REPORTS ON	WELLS	e and the second se	14-20-603-373 (B 6. If Indian, Allottee or Tribe Name	ĮΙΑ
Do not use t	this form for proposals to dr Use "APPLICATION FO	ill or to deepen or reen R PERMIT—" for such	try to a different re- proposals		Navajo Nation	_
	SUBMIT	IN TRIPLICATE		- 111.0	7. If Unit or CA, Agreement Designation	ı
1. Type of Well	Gos C			-	N/A  8. Well Name and No.	_
Oil Well	Gas XX Other				Clay Hill Canyon	, 3
2. Name of Operato		ion			9. API Well No.	-
Harken  3. Address and Tele	Southwest Corporat	.1011			43-037-31741	
	ox 612007 Dallas, 5	rexas 75261-20	07 (972)753-	6900	10. Field and Pool, or Exploratory Area	-
4. Location of Well	I (Footage, Sec., T., R., M., or Survey D	escription)			Undesignated 11. County or Parish, State	
Surface	Section 32-41S-				San Juan, Utah	
12. CH	ECK APPROPRIATE BOX	s) TO INDICATE NAT	TURE OF NOTICE	, REPOR	T, OR OTHER DATA	_
TYF	PE OF SUBMISSION		TYPE OF	ACTION		
	Notice of Intent Subsequent Report	Abando Recomp	letion		Change of Plans  New Construction  Non-Routine Fracturing	
المجسيا	Subsequent Report	Casing			Water Shut-Off	
	Final Abandonment Notice		Casing		Conversion to Injection	
		T Other _	Status		Dispose Water     (Note: Report results of multiple completion on Completion or Recompletion Report and Log for	₩c
13. Describe Propos	sed or Completed Operations (Clearly state a	Il pertinent details, and give pertine	nt dates, including estimated d	late of starting	any proposed work. If well is directionally d	ril

give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Harken requests approval to maintain the status of SI. The main geologic feature has not been penetrated and Harken's staff continues to evaluate all options of lease acquisition, communitization agreement, etc. and various other proposals.

The wellbore currently has 8-5/8" csg set @ 426' and 5-1/2" csg set @ 5663' which was purchased new in February of 1995 and cement was circulated to surface. Harken's staff does not believe there is any environmental risk associated with maintaining the current well status.

## \*\*\*\*\*PLEASE CONSIDER THIS SUBMITTAL CONFIDENTIAL\*\*\*\*\*

State of Utah Navajo Nation BIA - Gallup, New Mexico			The control of the co
14 hereby sertify that the foregoing is true and correct Signed OWO OWO COMPANY	Title Production	Administrator	Date <u>05/30/97</u>
(This space for Eederal or State office use)  Approved by Conditions of approval, if any:	Title		Date

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statem or representations as to any matter within its jurisdiction

## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

5. Lease Designation and Serial No. 14-20-603-373 (BIA)

		14-20-003-3/3 (DIA)
SUNDRY NOTICES	AND REPORTS ON WELLS	6. If Indian, Allottee or Tribe Name
Do not use this form for proposals to dr Use "APPLICATION FO		VE Navajo Nation
SUBMIT	IN TRIPLICATE IN	If Unit or CA. Agreement Designation
	/// JUL 2 1 19	<b>98                                     </b>
1. Type of Well Oil Gas Weil Well XX Other		8. Well Name and No.
2. Name of Operator	DIV. OF OIL, GAS 8	MINING Clay Hill Canyon 32
HARKEN SOUTHWEST CORPORA	rion 5.2, and 8	43-037-31741
3. Address and Telephone No. P. O. Box 612007, Dallas	. TX 75261-2007 (972)753-	
4. Location of Well (Footage, Sec., T., R., M., or Survey D	,	Undesignated
SURFACE: 744' FNL & 378		11. County or Parish, State
Section 32-41S		San Juan Co., Utah
12. CHECK APPROPRIATE BOX(	s) TO INDICATE NATURE OF NOTICE	
TYPE OF SUBMISSION	TYPE OF	ACTION
X Notice of Intent	Abandonment	Change of Plans
	Recompletion	New Construction
Subsequent Report	Plugging Back	Non-Routine Fracturing Water Shut-Off
	Casing Repair Altering Casing	Conversion to Injection
Final Abandonment Notice	X Other Status	Dispose Water
		(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)
a legal location on Harken's lease. The offset current owner of record has the major Harken's control, make it virtually in operations on this lease at this time.  Harken Southwest (HSW) respectful an additional 12 month period. New circulated to surface. Harken's staff maintaining the current shut-in status.	WINENTIAL CC:	vithin the past 24 months, and the circumstances, which are beyond posal to perform additional economic current wellbore status, of shut-in, for any of this wellbore and cement was mental risk associated with  State of Utah Navajo Nation - Minerals Dept BIA - Gallup, NM
Oil, Gas and Mining	d. U.S. III. and a series of department of grands	of the United States any false, fictitious or fraudulent statement
or representa es a p a er un es 3 ju s N	knowingly and willium to make to any department of agency	

## FINDING OF NO SIGNIFICANT IMPACT EA-94-103

## Harken Southwest Corporation Section 1, T42S, R24E and Section 6, T42S, R25E Section 31, T41S, R25E (SLPM) San Juan County, Utah

Based on the attached final Environmental Assessment (EA) for a proposed drilling of a well under an Application for Permit to Drill (APD), pipeline right-of-way and access road, impacting an area of approximately 9.06 acres across Navajo Tribal Trust Lands in San Juan County, Utah, I have determined that by implementation of the agency proposed action and environmental mitigation measures as specified in the EA, the proposed oil development project will have no significant impact on the quality of the human environment. In accordance with Section 102(2) (c) of the National Environmental Policy Act of 1969, as amended, an environmental impact statement will not be required.

This determination is supported by the following findings:

- 1. The EA disclosed the environmental consequences of the proposed action and identifies three potentially viable alternatives, which includes the "no action" alternative.
- 2. Protective measures will be levied to protect air, noise and water quality as outlined in Chapter E, Impacts to Affected Environment and Proposed Measures for Mitigation.
- 3. In compliance with the Endangered Species Act, an informal request for endangered species information from the Navajo Nation Natural Heritage Program was initiated by the project sponsor. A field survey was performed. The proposed action is planned not to jeopardize threatened and endangered species. See Chapter E Section 8.
- 4. An archeological survey was performed for the project; the survey document recommends clearance for the project. The Navajo Nation Historic Preservation Office has granted conditional clearance for the project; no effect on sites if stipulations of the archeological clearance are followed. The Archeological Clearance document is included in the Appendix.
- 5. The proposed action would improve the economic and social conditions of the affected Indian community.

Area Environmental Quality Officer

10-4-94 Date



## United States Department of the Interior BUREAU OF INDIAN AFFAIRS



IN REPLY REFER TO:

## Navajo Area Office P. O. Box 1060 Gallup, New Mexico 87305-1060

500/Environmental Quality

00T 0.5 1994

Mr. Jim R. Analla Environmental Assessment Services Post Office Box 1034 Gallup, New Mexico 87305

RE: Environmental Assessment for Harken Southwest Corporation's Right-of-Way Approval Request for the Big Sky 6E (6L) Wildcat Well Access Road and Pipeline, San Juan County, Utah EA-94-103

Dear Mr. Analla:

The Environmental Assessment (EA) for the proposed project has been reviewed. A Finding of No Significant Impact (FONSI) has been determined for the proposed project. The proposed action will not have a significant impact on the quality of the human and natural environment. Therefore, an environmental impact statement for the project is not required.

The enclosed FONSI determination should be appended to the final environmental assessment submitted to the Bureau of Indian Affairs and all copies prepared for distribution. Thank you for your cooperation

Sincerely,

Acting Assistant Area Director

Enclosure

API Well No: 43-037-31741-00-00

Permit No:

Well Name/No: CLAY HILL CANYON 32D

Company Name: HARKEN SOUTHWEST CORP

Location: Sec: 32 T: 41S R: 25E Spot: NWNW **Coordinates:** X: 4116596 Y: 659402

Field Name: UNDESIGNATED County Name: SAN JUAN

@ surf. plug @ 6'-100		6	Surf	plug	@	6'-100'
-----------------------	--	---	------	------	---	---------

ring Info	rmation			
String	Bottom (ft sub)	Diameter (inches)	Weight (lb/ft)	Length (ft)
HOL1	426	12.25		
SURF	426	8.625	24	426
HOL2	5663	7.875		
PROD	5663	5.5	15.5	5663
T1	5477	2.875		
	String HOL1 SURF HOL2 PROD	String         (ft sub)           HOL1         426           SURF         426           HOL2         5663           PROD         5663	Bottom (ft sub)         Diameter (inches)           HOL1         426         12.25           SURF         426         8.625           HOL2         5663         7.875           PROD         5663         5.5	Bottom (ft sub)         Diameter (inches)         Weight (lb/ft)           HOL1         426         12.25           SURF         426         8.625         24           HOL2         5663         7.875           PROD         5663         5.5         15.5

Hole: 12.25 in. @ 426 ft.

Surface: 8.625 in. @ 426 ft.

6) Baland plug @ 326'-526'

(+) Bollanced plug @ 1/32'-1332'

### **Cement Information**

String	BOC (ft sub)	TOC (ft sub)	Class	Sacks 139	
PROD	5663		G		
PROD	5663		В	725	
SURF	426	0	В	310	

Balanced plug @ 2350'-2550' Perforation Information 5491' - 5494'

5497' - 5503'

5514' - 5520'

5537' - 5541

5544' - 5549

@ Balanced plug @ 4281' - 4481'.

Tubing: 2.875 in. @ 5477 ft.

Formation In	HRMS 4381 ISMY 5271					
Formation HRMS						
ISMY	5271					
HOVNWE	5393					
DSCR	5461					
AKAH	5638					

Formation Depth

Production: 5.5 in. @ 5663 ft. 🗸

5665 TVD: TD:

Form 3160-5 (June 1990)

# \_\_NITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

5. Lease Designation and Serial No. 14-20-603-373 (BIA) SUNDRY NOTICES AND REPORTS ON WELLS 6. If Indian, Allottee or Tribe Name Do not use this form for proposals to drill or to deepen or reentry to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals Navaio Nation 7. If Unit or CA, Agreement Designation SUBMIT IN TRIPLICATE NA 1. Type of Well 8. Well Name and No. Oil Well Other Clay Hill Canyon 32D 2. Name of Operator Harken Southwest Corporation 9. API Well No. 43-037-31741 3. Address and Telephone No. 10. Field and Pool, or Exploratory Area MOV 16 200**0** 16285 Park Ten Place, Ste 600, Houston, Tx 77084 Undesignated 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) DIVISION OF 11. County or Parish, State NW/NW Sec 32-41S-25E OIL, GAS AND MINING 744' FNL & 378' FWL San Juan County, Utah CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 12. TYPE OF ACTION TYPE OF SUBMISSION Notice of Intent Change of Plans Abandonment CC: State of Utah **New Construction** Recompletion Navaio Nation -Non-Routine Practuring Subsequent Report Plugging Back Minerals Department Water Shut-Off Casing Repair BIA - Gallup, NM Conversion to Injection Altering Casing Final Abandonment Notice Dispose Water Other (Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form. 13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\* Harken Southwest plans to convert this well from shut-in status to abandoned: Mike Flanikan with the Farmington BLM is to be notified at least 24 hours before the plugging operations are commenced (505-599-8907) 1. MIRU CU. Set frac tk. & tubing sills. Install BOP's. Pull Production equipment as required. 2. PU & RIH 5 ½" cement retainer on tubing & set retainer @ 5,450' KB. Roll hole w/ 130 bbls. produced wtr. Cement w/ Class "B" as follows; 3. Upper Ismay top @ 5,271' / Desert Creek top perf @ 5,491'. 1st plug @ 5,171'- 5,549' (378') 73 sacks (15 bbls. cement). 39 sx (8 bbls) cement below retainer, 34 sx (7 bbls) cement above retainer. LD tubing for plug #2. TOH & LD setting tool. TIH tubing open ended for plug #2. 4. Hermosa top @ 4,381'. 2nd plug @ 4,281'- 4,481' (200') 25 sacks (5 bbls. cement). LD tubing for #3 plug. 5. DeChelly top @ 2,450': 3rd plug @ 2,350' - 2,550' (200') 25 sacks (5 bbls. cement). LD tubing for #4 plug. 6. Chinle top @ 1,232': 4th plug @ 1,132' - 1,332' (200') 25 sacks (5 bbls. Cement). LD tubing for #5 plug. 7. Surface casing shoe @ 426'. 5th plug @ 326'- 526' (200') 25 sacks (5 bbls. cement). LD tubing for #6 plug. 8. Surface. 6th plug @ 0'- 100' (100') 13 sacks (2.5 bbls. cement). LD tubing. ND BOP. Remove wellhead. 9. \*Install P& A marker 4' below ground level. 10. Reclaim site & re-seed. \*Adhere to "BLM CONDITIONS OF APPROVAL" regarding surface rehabilitation. Notify Surface Managing Agency seven days prior to seeding so that they may be present for that operation.

FORM APPROVED

Budget Bureau No. 1004-0135

Expires: March 31, 1993

14. I hereby certify that the foregoing is true and correct

Signed Caraly Bryant

Title Regulatory Conditions of Education Date 11-13-00

Title Copy spart to operation

Accepted by the Date: 11-13-00

Utah Division of Oil, Gas and Mining

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

### Clay Hill Canyon 32D

Updated 11/10/00 DJP



Surf. Footage: 744' FNL, 378' FWL Bottom Footage: 474' FNL, 859'FWL Location: Sec 32 – T41S – R25E County, State: San Juan, Utah

Field: Undesignated

GR 4652' KB 4665'

Core #1: 5489-5549' Core #2: 5549-5609'

Formation	Depth	Depth
	Measured	True Vert
Navajo		578
Chinle		1232
DeChelly		2450
Organ Rock		2671
Cedar Mesa		3351
Kick-off Point		3532
Hermosa	4381	4369
Upper Ismay	5271	5201
Hovenweep Sh	5393	5314
Lower Ismay	5399	5320
Gothic	5440	5358
Desert Creek	5461	5378
Chimney Rock	5628	5533
Akah	5638	5542

8-5/8" 24# J55 @ 426' Cmtd w/ 310 sx class B to surface

Top of Cement @ 1230'
<a href="mailto:Chinle">Chinle</a> @ 1232'

DeChelly @ 2450'

KOP @ 3532'

Hermosa @ 4381'

DV at 4482'

Upper Ismay @ 5271'

Lower Ismay @ 5399'

Desert Creek @ 5461'

Core Top 5489'

Perf 5491-5494 (3/13/95) 450 gal 15% HCL NEA Perf 5497-5503 (3/13/95) 750 gal 15% HCL NEA Perf 5514-5520'(3/13/95) 900 gal 15% HCL NEA Perf 5528-5532'(3/13/95) 300 gal 15% HCL NEA Perf 5537-5541'(3/13/95) 600 gal 15% HCL NEA Perf 5544-5549'(3/13/95) 150 gal 15% HCL NEA Frac well w/ 100,500# sand, 53620 gal (5/19/95)

Core Bottom 5609'

PBTD: 5616' md

5-1/2" 15.5# K55 csg @ 5663" md. Cmt 139 sx cl G + 725 sx cl B. Circ to pit:

MOV 16 2000

DIVISION OF OIL, GAS AND MINING

TVD @ 5569' MD @ 5665'

## Clay Hill Canyon 32D

Proposal to P&A 11/10/00

MD @ 5665'

Well: Clay Hill Canyon 32D Surf. Footage: 744' FNL, 378' FWL Bottom Footage: 474' FNL, 859'FWL

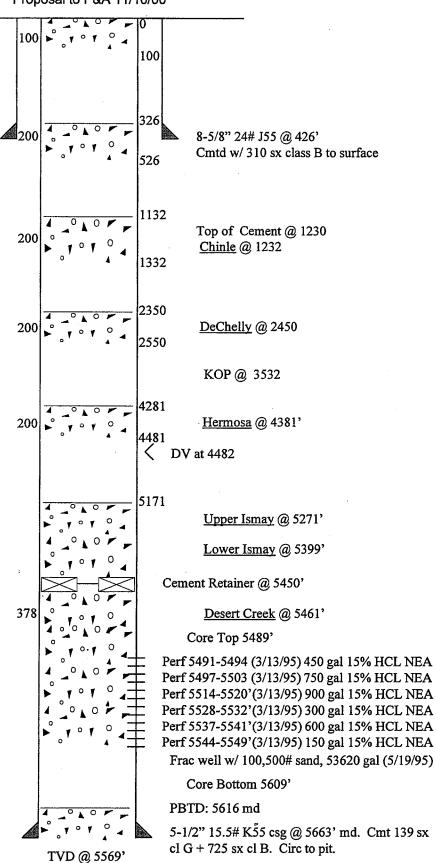
Location: Sec 32 - T41S - R25E County, State: San Juan, Utah

Field: Undesignated

GR 4652' KB 4665'

Core #1: 5489-5549' Core #2: 5549-5609'

Formation	Depth	Depth
•	Measured	True Vert
Navajo		578
Chinle		1232
DeChelly		2450
Organ Rock		2671
Cedar Mesa		3351
Kick-off Point		3532
Hermosa	4381	4369
Upper Ismay	5271	5201
Hovenweep Sh	5393	5314
Lower Ismay	5399	5320
Gothic	5440	5358
Desert Creek	5461	5378
Chimney Rock	5628	5533
Akah	5638	5542



### STATE OF UTAH DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801

### MONTHLY OIL AND GAS PRODUCTION REPORT

OI	PERATOR NAM	IE AND ADDRES	s								
Susan Herrera						COUNT NU	MBER:	N9290			
HARKEN - <del>rim</del> southwest corporation c/o holcomb oil and gas, inc.					REPORT I	PERIOD (MO	ONTH/YEAR):	02/	02/2001		
	PO BOX 2058 FARMINGTO	N, <b>NM 874</b> 99-2058	3		AMENDE	AMENDED REPORT (Highlight Changes)					
WELL NAME			Producing	Well	Well	Days	P	roduction Volume	es		
API Number	Entity	Location	Zone	Status	Туре	Oper	OIL (BBL)	GAS (MCF)	WATER (BBL)		
NAVAJO TRI	<u> </u>	,									
4303730971	09420	40S 24E 13	DSCR	P	ow	28	1,071	551	2,296		
NAVAJO TRI	BAL 41-2										
4303731041	09437	42S 24E 02	DSCR	P	ow	19	174	23	0		
NAVAJO TRI	BAL 32-26							-			
4303731060	09990	40S 22E 26	DSCR	P	ow	8	104	291	0		
NAVAJO TRI		.05 225 20	20011								
4303730977		40S 24E 05	DSCR	P	ow	28	93	0	0		
SAHGZIE 1	10130	405 Z4L 03	DOCK					·			
4303731472	11032	42S 24E 05	DSCR	P	ow	28	1,025	476	0		
	11032	423 24E 03	DSCR	1	<del>  0w</del>	20	1,023	470	-		
ANASAZI 1	11040	400 0 4E 05	DOOD	P	ow	28	1 200	1 240	0		
4303731478		42S 24E 05	DSCR	P	1.0w	20	1,308	1,349	U		
CAJON MESA					0111		245		<b>C1</b>		
4303731497		40S 25E 08	DSCR	P	OW	27	245	355	61		
MONUMENT											
4303731509	11087	40S 25E 08	DSCR	P	ow	28	239	496	0		
RUNWAY 10	G-1										
4303731515	11105	40S 25E 10	DSCR	S	OW	28	1,412	1,613	432		
<b>RUNWAY 10</b>	E-2				1						
4303731550	11128	40S 25E 10	DSCR	S	GW	27	279	917	0		
MONUMENT	`17E-2										
4303731547	11139	40S 25E 17	DSCR	S	ow	26	157	548	<u>0</u>		
LONE MOUN	ITAIN CREEK	K 12F-1									
4303731545	11148	42S 24E 12	DSCR	P	ow	22	149	533	12		
RUNWAY 10	C-5A										
4303731597		40S 25E 10	DSCR	P	ow	24	221	899	40		
TOTALS 6477 8051 2841							2841				
I hereby certify	that this repo	rt is true and com	plete to the bes	st of my ki	owledge.	Date:		April 13, 2001			
Signature	Signature Susan M. Herrera (505) 326-0550										

APR 1 7 2001

DIVISION OF OIL, GAS AND MINING

# STATE OF UTAH DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801

### MONTHLY OIL AND GAS PRODUCTION REPORT

OPE	ERATOR NAM	E AND ADDRES	SS		_					
c	·									
	Susan Herrera	EST CORPORAT	LION		UTAH AC	UTAH ACCOUNT NUMBER: N9290				
		B OIL AND GAS			PEPOPT	REPORT PERIOD (MONTH/YEAR): 02/2001				
	O BOX 2058	D OIL AND GAS	, INC.		REPORT	rekiod (M	ONTH/TEAK):	02/	2001	
FARMINGTON, NM 87499-2058						D REPORT		(Highlight Change	(z:	
							لـــا	(BB		
					_					
WELL NAME	Partie :		Producing	Well	Well	Days		roduction Volume		
API Number BLUE HOGAN	Entity	Location	Zone	Status	Type	Орег	OIL (BBL)	GAS (MCF)	WATER (BBL)	
4303731562	11161	42S 23E 01	DSCR	P	ow	27	900	770		
ANASAZI 5L-3		423 23E 01	DSCK	Г		21	800	778	36	
4303731572	11207	42S 24E 05	DSCR	P	ow	28	1,187	1 204		
BROWN HOGA			DOOR		- "	20	1,107	1,284	0	
4303731573	11215	42S 23E 01	DSCR	P	ow	28	297	504	0	
STERLING 36L							27,	304		
4303731595	11224	41S 23E 36	DSCR	S	ow	0	0	0	0	
MULE 31K (N)	****								<u>·</u>	
4303731617	11326	41S 24E 31	DSCR	P	ow	28	308	348	73	
NORTH HERON	V 35C									
4303731616	11479	41S 25E 35	DSCR	S	OW	0	0	0	0	
BURRO 31I										
4303731708	11496	41S 24E 31	DSCR	P	OW	28	489	0	0	
JACK 31G	1110			_						
4303731709	11497	41S 24E 31	DSCR	S	ow	0	0	0	0	
MULE 31M 4303731710	11400	410.045.31	Daon	_						
BIG SKY 6E (6L	11498	41S 24E 31	DSCR	P	OW	28	1,074	333	120	
4303731714	11722	42S 25E 06	DSCR	P	ow	26	262		•	
CLAY HILL CA		423 23E 00	DSCK	Г	OW	26	262	551	0	
4303731741	11734	41S 25E 32	DSCR	TA	NA	0	0	0	0	
ANASAZI 6H-1		118 232 32	DOCK	171	11/2				U	
4303731744	11773	42S 24E 06	DSCR	P	ow	28	205	303	0	
·							203	303		
					Т	OTALS	4622	4101	229	
								1101	22)	
601 (1 (F)	ITTO									
COMME	VIS: -									
						···				
						277111			<del></del>	
hereby certify that this report is true and complete to the best of my knowledge.  Date:  April 13, 2001										
	معزر	, 11 1		-			L 224 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			
Signature Sugar M. Humpung						Teleph	one Nûmber	(505) 32	26-0550	
		Susan N	1. Herrera							
						. 07	·			

APR 17 2001

DIVISION OF OIL, GAS AND MINING

# STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING	5. LEASE DESIGNATION AND SERIAL NUMBER: SEE ATTACHED
SUNDRY NOTICES AND REPORTS ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Navajo
Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to	7. UNIT OF CA AGREEMENT NAME: SEE ATTCHED
drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.  1. TYPE OF WELL  OUT ATTACHED	8. WELL NAME and NUMBER:
OIL WELL GAS WELL OTHER SEE ATTACHED	SEE ATTACHED
2. NAME OF OPERATOR: RIM Southwest Corporation	9. API NUMBER: SEE ATTACH
3. ADDRESS OF OPERATOR: PHONE NUMBER:	10. FIELD AND POOL, OR WILDCAT:
P.O. Box 145 <sub>City</sub> Farmington <sub>STATE</sub> NM <sub>ZiF</sub> 87499 (505) 327-5531	Greater Aneth
4. LOCATION OF WELL  FOOTAGES AT SURFACE: SEE ATTACHED  QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:	COUNTY: San Juan
·	UTAH
11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPO	ORT, OR OTHER DATA
TYPE OF SUBMISSION TYPE OF ACTION	
NOTICE OF INTENT	REPERFORATE CURRENT FORMATION
(Submit in Duplicate) ALTER CASING FRACTURE TREAT	SIDETRACK TO REPAIR WELL
Approximate date work will start: CASING REPAIR NEW CONSTRUCTION	TEMPORARILY ABANDON
CHANGE TO PREVIOUS PLANS OPERATOR CHANGE	TUBING REPAIR
CHANGE TUBING PLUG AND ABANDON	VENT OR FLARE
SUBSEQUENT REPORT CHANGE WELL NAME PLUG BACK (Submit Original Form Only)	WATER DISPOSAL
Date of work completion:  CHANGE WELL STATUS  PRODUCTION (START/RESUME)	water shut-off other: Corporate Name
COMMINGLE PRODUCING FORMATIONS RECLAMATION OF WELL SITE	Change
CONVERT WELL TYPE RECOMPLETE - DIFFERENT FORMATION	
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volume Corporate Name Change from Harken Southwest Corporation to RIM Southwest Corporation reporting requirements.	
	PECEIVED
	ACC 10 <b>289</b> i
	DIVISION OF OIL, GAS AND MINING
NAME (PLEASE PRINT), W.J. Holcomb TITLE Vice-President	
SIGNATURE 4/23/2001	

(This space for State use only)

### **RIM Southwest Corporation**

5 Inverness Drive East Englewood, Colorado 80112 (303) 799-9828 ext. # 303 (303) 799-4259 (fax)

December 17, 2002

Mr. Stephen Mason United States Department of the Interior Bureau of Land Management Farmington Field Office 1235 La Plata Highway, Suite A Farmington, New Mexico 87401

Re: Sterling 36L #1 1390' FSL & 250' FWL sec 33 T 41S R 23E, Lse. 14-20-603-248 Clay Hill Canyon #32D 744' FNL & 378' FWL sec 32 T 41S R 25E, Lse. 14-20-603-373 San Juan Co., Utah Navajo #208 1759' FNL & 1070' FEL sec 2 T 29N R 19W, Lse. NOG-8707-1145 Navajo #157 760' FNL & 585' FWL sec 12 T 29N R 19W, Lse. NOG-8707-1145 Navajo #158 1980' FSL & 1070' FWL sec 12 T 29N R 19W, Lse. NOG-8707-1145 San Juan Co., New Mexico

Dear Mr. Mason:

Rim Southwest Corporation is in receipt of your letter's of December 11, 2002 concerning the Sterling 36L #1 & the Clay Canyon #32D in San Juan Co., Utah and the Navajo #208, #157, & #158 in San Juan Co., New Mexico. RIM Southwest intends to P & A all of the above wells as per the sundry notice's submitted. We are having difficulty obtaining recognition as operator of these wells and others from the Navajo Nation. We will not Plug any wells until we obtain that recognition from the Navajo Nation. Hopefully that recognition will be shortly forth coming as we would like to conduct the work this summer or early fall of 2003. I will try to keep you informed as to our progress in being recognized as operator. Thank you for you patience.

Sincerely,

Kenneth J Kundrik
Operations Engineer

CC: BIA Window Rock, Navajo Nation Minerals Department, Akhtar Zaman Director

State of New Mexico Energy, Minerals, & Natural Resources Department

State of Utah Division of Oil, Gas & Mining

RECEIVED

DEC 1 9 2002

DIV. OF OIL, GAS & MINING

#### **OPERATOR CHANGE WORKSHEET**

1. GLH 2. CDW 3. FILE

Change of Operator (Well Sold)

Designation of Agent/Operator

### X Operator Name Change

Merger

The operator of the well(s) listed below has changed, effective:	12/1/2000
FROM: (Old Operator):	TO: ( New Operator):
N9290-Harken Southwest Corporation	N1715-Rim Southwest Corporation
5 Inverness Drive, East	PO Box 145
Denver, CO 80112	Farmington, NM 87499
Phone: (303) 799-9828	Phone: (505) 327-5531
CA No.	Unit:

WELL(S)	WELL(S)							
NAME	SEC	TWN	RNG	API NO	ENTITY	LEASE	WELL	WELL
					NO	TYPE	TYPE	STATUS
					_			
NAVAJO TRIBAL 32-26	26	400S	220E	4303731060	9990	Indian	OW	S
NAVAJO TRIBAL 14-10	10	400S	240E	4303730977	10130	Indian	OW	P
NAVAJO TRIBAL 23-13	13	400S	240E	4303730971	9420	Indian	OW	P
CAJON MESA 8D-1	08	400S	250E	4303731497	11074	Indian	OW	P
MONUMENT 8N-2	08	400S	250E	4303731509	11087	Indian	OW	P
RUNWAY 10G-1	10	400S	250E	4303731515	11105	Indian	OW	P
RUNWAY 10E-2	10	400S	250E	4303731550	11128	Indian	GW	P
RUNWAY 10C-5A	10	400S	250E	4303731597	11152	Indian	OW	P
MONUMENT 17E-2	17	400S	250E	4303731547	11139	Indian	OW	P
STERLING 36L-1	36	410S	230E	4303731595	11224	Indian	OW	S
MULE 31K (N)	31	410S	240E	4303731617	11326	Indian	OW	P
BURRO 31I	31	410S	240E	4303731708	11496	Indian	OW	P
MULE 31M	31	410S	240E	4303731710	11498	Indian	OW	P
JACK 31G	31	410S	240E	4303731709	11497	Indian	OW	S
CLAY HILL CANYON 32D	32	410S	250E	4303731741	11734	Indian	OW	TA
NORTH HERON 35C	35	410S	250E	4303731616	11479	Indian	OW	S
BLUE HOGAN 1J-1	01	420S	230E	4303731562	11161	Indian	OW	P
BROWN HOGAN 1A-2	01	420S	230E	4303731573	11215	Indian	OW	P
NAVAJO TRIBAL 41-2	02	420S	240E	4303731041	9437	Indian	OW	P
SAHGZIE I	05	420S	240E	4303731472	11032	Indian	OW	P
ANASAZI 1	05	420S	240E	4303731478	11042	Indian	OW	P
ANASAZI 5L-3	05	420S	240E	4303731572	11207	Indian	OW	P
ANASAZI 6H-1	06	420S	240E	4303731744	11773	Indian	OW	P
LONE MOUNTAIN CREEK 12F-1	12	420S	240E	4303731545	11148	Indian	OW	P
BIG SKY 6E (6L) I	06	420S	250E	4303731714	11722	Indian	ow	P

#### **OPERATOR CHANGES DOCUMENTATION**

Enter date after each listed item is completed

1. (R649-8-10) Sundry or legal documentation was received from the FORMER operator on:

4/27/2001

2. (R649-8-10) Sundry or legal documentation was received from the NEW operator on:

4/27/2001

3. The new company was checked on the Department of Commerce, Division of Corporations Database on:

**6/30**/2003

4. Is the new operator registered in the State of Utah:	YES Business Number: 794466-0143
5. If <b>NO</b> , the operator was contacted contacted on:	
6. (R649-9-2)Waste Management Plan has been received on:	8/13/2003
7. Federal and Indian Lease Wells: The BLM and or the BIA or operator change for all wells listed on Federal or Indian leases on:	has approved the merger, name change, not given
8. Federal and Indian Units: The BLM or BIA has approved the successor of unit operator for we	ells listed on: <u>n/a</u>
9. Federal and Indian Communization Agreements ("CA The BLM or BIA has approved the operator for all wells listed within	· ·
10. Underground Injection Control ("UIC") The Division for the enhanced/secondary recovery unit/project for the water disposa	n has approved UIC Form 5, <b>Transfer of Authority to Inject,</b> al well(s) listed on:
DATA ENTRY:	0/04/0000
1. Changes entered in the Oil and Gas Database on:	8/26/2003
2. Changes have been entered on the Monthly Operator Change Spread	d Sheet on: <u>8/26/2003</u>
3. Bond information entered in RBDMS on:	n/a
4. Fee wells attached to bond in RBDMS on:	n/a
STATE WELL(S) BOND VERIFICATION:	
1. State well(s) covered by Bond Number:	n/a
FEDERAL WELL(S) BOND VERIFICATION:	
1. Federal well(s) covered by Bond Number:	n/a
INDIAN WELL(S) BOND VERIFICATION:	
1. Indian well(s) covered by Bond Number:	RLB0001937
FEE WELL(S) BOND VERIFICATION:  1. (R649-3-1) The NEW operator of any fee well(s) listed covered by Bond	nd Number
1. (1047-5-1) The IVE W Operator of any fee well(s) listed covered by Bo	nd Number n/a
2. The <b>FORMER</b> operator has requested a release of liability from their both The Division sent response by letter on:	ond on: <u>n/a</u> n/a
LEASE INTEREST OWNER NOTIFICATION:	
3. (R649-2-10) The <b>FORMER</b> operator of the fee wells has been contacted of their responsibility to notify all interest owners of this change on:	d and informed by a letter from the Divisionn/a
COMMENTS:	
Because this was a merger, all LA and PA wells belong to Rim South computer as Harken Southwest because no list was provided to move	

Form 3160- 5 (September 2001)

### **UNITED STATES** DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

FORM APPROVED OMB No. 1004-0135 Expires: January 31,2004

				5. Lease Seria	ıl No.	
SUNDRY NOTICES AND REPORTS ON WELLS					14-20-693-373 (BIA)	
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.				6. If Indian, Allottee, or Tribe Name		
ab.	anaonea well. Use Form 3160	)-3 (APD) for such j	proposals.	S 7077 1 C	Navajo Nation	
SUBMIT IN TR	IPLICATE - Other Inst	ructions on reve	erse side	7. If Unit or C	A. Agreement Designation	
1. Type of Well					NA	
Oil Well Gas Well	Other	<b>.</b>		8. Well Name	and No.	
2. Name of Operator				Clay Hill Car	ivon 32D	
RIM Southwest Corporation				9. API Well N		
3a. Address		3b. Phone No. (	(include area code)		43-037-31741	
	, Englewood CO 80112	(30	3) 799-9828	10. Field and I	Pool, or Exploratory Area	<del></del>
4. Location of Well (Footage, Sec., T	., R., M., or Survey Description)				Undesignated	
				11. County or	Parish, State	
744' FNL & 378' FWL NWNW se	c 32 - Twp 41S - Rge 25E				San Juna Co., Utah	<del></del>
12. CHECK APPROP	PRIATE BOX(S) TO INDI	CATE NATURE	OF NOTICE, REPOR	RT, OR OTH	ER DATA	
TYPE OF SUBMISSION			TYPE OF ACTION			
Notice of Intent	Acidize	Deepen	Production ( S	tart/ Resume)	Water Shut-off	
	Altering Casing	Fracture Treat	Reclamation		Well Integrity	
X Subsequent Report	Casing Repair	New Construction	n Recomplete		Other	
	Change Plans	Plug and abandor	Temporarily A	bandon		
Final Abandonment Notice	Convert to Injection	Plug back	Water Disposa	ıl		
<ul><li>5) TIH to 5427 w/Cmt.</li><li>6) Attempt to establish i</li></ul>	final inspection.) vice on 12/8/2003. circulate hole to produce 2 7/8" tubing. Change o with bit and casing scrap Retainer. Set Retainer. P	ed water. ver and pick up per. Laydown bi ressure test casin ion. (1/4 bbls/m	2 3/8" work string to t and casing scraped ing to 500 psi. No le tin at 1000 psi). Co	w/ 4 3/4" bit r. Pick up Co aks. ntacted BLM	and casing scraper. ement retainer.  I and Nation Nation	VED
11) Set Plug #6 96' to sur 12) Lay down tubing. RD 13) Weld on steel cap w/	face w/ 16 sxs neat ceme floor. ND BOP. Dig cel Company Name, Legal	ent. All plugs wi llar out.Cut off v Description and	tnessed by Davis B vellhead 3' below g I Well Name on cap	ennallie of I roung level. o. Rig Relea	Farmin <b>gton (BLM)</b> , GAS & sed 12/11/03	MINING
14. I hereby certify that the foregoing is						=
Name (Printed/ Typed)						
Kenneth	J. Kundrik	Title	Op	erations E	ngineer	
Signature Ken Kunn	Colo	Date		12/21/20	003	<b></b> 
C. L. Company of the	THIS SPACETRO		STATE OFFICE USE		Military services and the services of the serv	
Approved by		Title	THE PROPERTY OF THE PROPERTY O	Da	ate.	
Conditions of approval, if any are attache	d. Approval of this notice does not	warrant or		ĮD:	300	_
certify that the applicant holds legal or eq						

which would entitle the applicant to conduct operations thereon.

Title 18 U.S.C. Section 1001 AND Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitiousor fraudulent statements or representations as to any matter within its jurisdiction.

Clay Hill Canyon 32D Updated 11/10/00 DJP Plu6 # 4 96'-D

Well: Clay Hill Canyon 32D Surf. Footage: 744' FNL, 378' FWL Bottom Footage: 474' FNL, 859'FWL Location: Sec 32 - T41S - R25E County, State: San Juan, Utah Field: Undesignated

> GR 4652' KB 4665'

Core #1: 5489-5549" Core #2: 5549-5609'

Formation	Depth	Depth	
	Measured	True Yert	
Navajo		578	
Chinle		1232	
DeChelly		2450	
Organ Rock		2671	
Ceder Mesa		3351	
Kick-off Point		3532	
Hermosa	4381	4369	
Upper Ismay	5271	5201	
Hovenweep Sh	5393	5314	
Lower Ismay	5399	5320	
Gothic	5440	5358	
Desert Crock	5461	5378	
Chimney Rock	5628	5533	
Akah	5638	5542	

COMMENT RelaTINGS 5427

Perf 5491-5494 (3/13/95) 450 gal 15% HCL NEA Perf 5497-5503 (3/15/95) 750 gal 15% HCL NEA Perf 5514-5520'(3/13/95) 900 gal 15% HCL NEA Perf 3528-5532'(3/13/95) 300 gal 15% HCL NEA Perf 5537-5541'(3/13/95) 600 gal 15% HCL NEA Perf 5544-5549'(3/13/95) 150 gal 15% HCL NEA Frac well w/ 100,500# sand, 53620 gal (5/19/95)

Core Bottom 5609'

PBTD: 5616' md

5-1/2" 15.5# K55 csg @ 5663' md. Cmt 139 sx cl G + 725 ax ol B. Circ to pit.

Form 3160-5 (August 2007)

### **UNITED STATES** DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

FORM APPROVED OMB No. 1004-0137 Expires: July 31, 2010

5. Lease Serial No. 14-20-693-373 BIA

SUNDRY NOTICES AND REPOR  Do not use this form for proposals to de  abandoned well. Use Form 3160-3 (APD)	rill or to re-enter an	6. If Indian, Allottee, or Tribe Name NAVAJO NATION	
SUBMIT IN TRIPLICATE – Other Instruc	ctions on page 2.	7. If Unit or CA/Agreement, Name a	ınd/or No.
1. Type of Well  Oil Well  Gas Well  Other		Well Name and No.     CLAY HILL CANYON 32	 2D
2. Name of Operator RIM SOUTHWEST CORPORATION		9. API Well No. 43-037-31741	
3a. Address 5 Inverness Drive East Englewood, CO 80112	3b. Phone No. (include area code) 303-799-9828	<ol> <li>Field and Pool, or Exploratory A Undesignated</li> </ol>	rea
<ol> <li>Location of Well (Footage, Sec., T., R., M., or Survey Description)</li> <li>744' FNL &amp; 378</li> <li>NWNW Sec 32-T</li> </ol>	- · · · <del>-</del>	11. County or Parish, State San Juan, UT	
12. CHECK THE APPROPRIATE BOX	(ES) TO INDICATE NATURE OF NOTI	CE, REPORT, OR OTHER DAT	Α
TYPE OF SUBMISSION	TYPE OF ACTION	)N	
Notice of Intent Acidize Altering Casing	Deepen Production Fracture Treat ✓ Reclamate		r Shut-off Integrity
Subsequent Report Casing Repair Change Plans	New Construction Recomple Plug and abandon Temporar	ete Other	
Final Abandonment Notice Convert to Injection	Plug back Water Di	sposal	
13. Describe Proposed or Completed Operation: Clearly state all pert the proposal is to deepen directionally or recomplete horizontally, Attach the Bond under which the work will be performed or proviously completion of the involved operations. If the operation testing has been completed. Final Abandonment Notices shall be determined that the site is ready for final inspection.)	, give subsurface locations and measured an ride the Bond No. on file with the BLM/ BIA results in a multiple completion or recomple	d true vertical depths of all pertinent. Required subsequent reports musetion in a new interval, a Form 3160	nt markers and zones.  It be filed within 30 days 0-4 must be filed once

This well was plugged and abandoned in December 2003. The location has been reclaimed and is ready for final inspection.

Accepted by the Utah Division of Oil, Gas and Mining For Record Only

14. I hereby certify that the foregoing is true and correct. Name (Printed/ Typed)	ŀ				
Kenneth Kundrik	Title	A&D Manager			
Signature Kennell J. Kundrils	Date	September 30, 2015			
THIS SPACE FOR FEDERAL OR STATE OFFICE USE					
Approved by					
	Title	Date			
Conditions of approval, if any, are attached. Approval of this notice does not warrant or c					
the applicant holds legal or equitable title to those rights in the subject lease which would entitle		Office			
the applicant to conduct operations thereon.	<u> </u>				
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any p	erson knowingly and willful	ly to make to any department or agency of the United States any	false.		

(Instructions on page 2)

fictitiousor fraudulent statements or representations as to any matter within its jurisdiction.